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ABSTRACT

Prompted by widely held concerns about middle schools' academic rigor and the effectiveness of activities designed to help early adolescents develop in non-academic realms, many middle school educators have renewed efforts to develop curricula and instructional strategies that challenge students academically and expand their intellectual interests, to ensure that teachers receive appropriate training to meet student needs, and to create more nurturing and supportive environments. This report uses data from the Schools and Staffing Survey and the accompanying Teacher Follow-Up Survey to describe various aspects of middle schools, examine how they have changed over time, and compare middle schools with elementary and secondary schools. Following an introduction exploring policy issues related to middle schools, the report examines data in the areas of: (1) organization of schooling, including locations, size and other characteristics, and classroom organization and class size; (2) programs and services, including health-related services; (3) decision making and management, including site-based decision making and principals' and teachers' perceptions of their influence; (4) staffing, including qualifications, teacher workload, and staff turnover; and (5) school climate, including teacher satisfaction, and teachers' and administrators' ratings of problems at their schools. The concluding section of the report explores areas for future research. Tables and notes are appended. (Contains 66 references.) (HTH)

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Statistical Analysis Report July 2000

In the Middle

Characteristics of Public Schools With a Focus on Middle Schools

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Executive Summary

Educators, parents, policymakers, and researchers have focused considerable attention on middle-level education in recent years, prompted by widely held concerns about middle schools' academic rigor and the effectiveness of activities designed to help early adolescents develop in nonacademic realms. As a result, many middle school educators have renewed efforts to develop curricula and instructional strategies that challenge students academically and expand their intellectual interests, to ensure that teachers receive appropriate training to meet the needs of this age group, and to create more nurturing and supportive environments.

This report uses data from the Schools and Staffing Survey (SASS), conducted in 1987–88, 1990–91, and 1993–94, and the accompanying Teacher Follow-up Survey (TFS), conducted a year after each administration of SASS, to describe various aspects of middle schools, examine how they have changed over time, and compare middle schools with elementary and secondary schools. These data provide information on fundamental dimensions of school organization, programs and services, decision making and management, staffing matters, instructional practices, and school climate. Only public schools are described; there were too few private middle schools to analyze in the SASS data set.

Definitions and Overview of School Levels

Middle schools include some of the grades from 5 through 8, by any definition; the most common configuration is grades 6–8. This report defines school levels in the following way.[1]

Elementary	Schools with at least one grade lower than 5 and no grade higher than 8.
Middle	Schools with no grade lower than 5 and no grade higher than 8.
Secondary	Schools with no grade lower than 7 and at least one grade higher than 8.
Combined	Schools with at least one grade lower than 7 and at least one grade higher than 8. Schools with only ungraded classes (no grades reported in K–12) were included with combined schools.

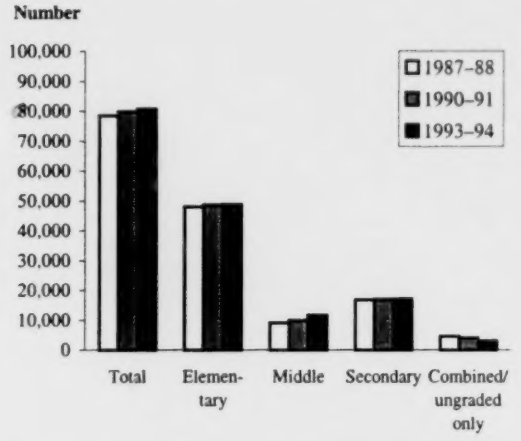
In 1993–94, there were 80,740 public schools in the United States, about 15 percent of them middle schools. The number of middle schools increased from 9,086 to 11,712 between 1987–88 and 1993–94, while the number of elementary and secondary schools remained about the same (figure A). The growth occurred almost solely in schools with grades 6–8. Of some 41.6 million students in public schools in 1993–94, 6.8 million were enrolled in middle schools.

Organization of Schooling

The self-contained class structure, the norm in elementary schools, allows teachers to track their students' progress closely and provides a consistent classroom environment for young students.

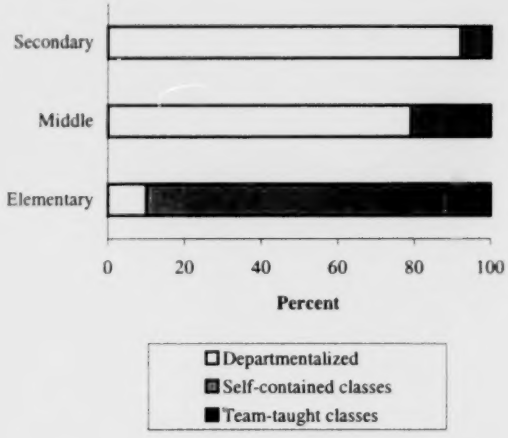
[1]Previous publications that use SASS data have generally lacked a category for middle schools and used different definitions of elementary and secondary schools.

Figure A—Number of schools of different levels: 1987–88, 1990–91, and 1993–94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1987–88, 1990–91, and 1993–94.

Figure B—Percentage of teachers with different types of classes, by school level: 1993–94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Teacher Questionnaire): 1993–94.

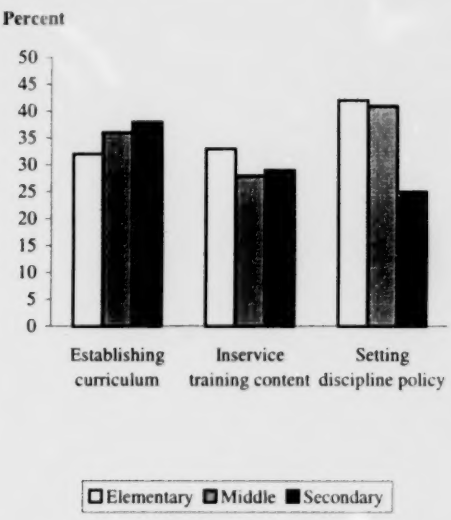
Secondary schools, on the other hand, are usually organized in departments in order to provide teachers who have in-depth subject-specific training and certification and to allow students some choice among courses. Middle school reformers have searched for creative ways to combine the advantages of both approaches. In practice, middle schools (like secondary schools) most often have departmentalized classes; 79 percent of middle school teachers and 92 percent of secondary school teachers taught in departments in 1993–94 (figure B). By contrast, 79 percent of elementary school teachers had self-contained classes. Many of the ways in which middle schools resemble secondary schools and differ from elementary schools flow from the way that classes and teachers are organized.

Decision Making and Management

For some basic issues of school management, principals' perceptions of their influence either did not differ or differed only slightly by school level in 1993–94. High proportions of principals reported having a lot of influence on evaluating teachers' performance (at least 95 percent at each level), hiring full-time teachers and setting discipline policy (about 80–90 percent), and determining the content of inservice training programs (70–75 percent). At least 50 percent of principals at each level reported that they had a lot of influence on establishing curriculum.

Teachers as well as principals were asked to rate their influence over a range of school policies and practices. In 1993–94, at least 25–30 percent of teachers at each level reported that they had a lot of influence in three areas: setting discipline policy, establishing curriculum, and determining the content of inservice training (figure C). In the area of setting discipline policy, the percentage of teachers who thought that they had a lot of influence decreased notably as school level increased (from 42 percent of teachers at elementary schools

Figure C—Percentage of teachers who reported that they had a lot of influence* over establishing curriculum, determining content of inservice training, and setting discipline policy, by school level: 1993–94



*Ratings of influence are counted as "a lot" if respondents marked one of the highest two numbers (5 or 6) on a 6-point scale.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

to 31 percent at middle schools and 25 percent at secondary schools). For establishing curriculum, teachers' estimates of their influence increased somewhat with school level.

School Staff

Teachers' Certification Status

One policy concern is that middle school teachers may be less prepared than secondary school teachers to teach subject-specific classes, and certification data from the 1993–94 SASS provide at least limited support for this concern. Middle school teachers were slightly less likely than elementary or secondary school teachers to have regular/alternative certification[2] in their main field, the field in which they taught the most classes (72 percent versus 78 percent and 76 percent, respectively). Lack of certification is a particular concern for teachers who teach a core academic subject. Of departmentalized middle school teachers whose main assignment was mathematics, science, English, or social studies, approximately 7 to 8 percent lacked certification in that field in 1993–94. In contrast, 2 to 3 percent of such secondary school teachers lacked certification in their core field.

Teachers' Education, Experience, and Professional Development Activities

The likelihood that a teacher had attained a master's or other advanced degree increased somewhat with school level in 1993–94. Also, a slightly higher percentage of teachers with three or fewer years of experience were teaching at middle schools than at elementary or secondary schools (the increase in new middle schools may partly explain this finding). On three of five topics included in the survey (in-depth study in their subject, teaching methods in their field, and student assessment), teachers were less likely to participate in training as school level increased. Overall, elementary school teachers were most likely to agree with several positive statements about this professional development training, middle school teachers somewhat less, and secondary school teachers were the least likely to agree.

Handling Teaching Vacancies

Roughly one-third of middle and secondary schools reported that they had great difficulty filling a teaching vacancy, or could not fill it, in

[2]Teachers reported the type of certification that they had: advanced; regular or alternative; provisional, probationary, temporary, or emergency; or none.

1993–94—about twice the proportion as that for elementary schools. Because schools at the two higher levels are mainly departmentalized, the pool of applicants for many openings is limited to those who have specialized preparation in a particular subject, as well as appropriate school-level credentials if required.

Teacher Retention, Mobility, and Attrition

Generally, 80–90 percent of teachers surveyed in 1993–94 remained at the same school the following school year, with a slightly lower percentage for those at middle schools. Similarly, middle school teachers were slightly more likely to move to a different school within one year than teachers at the secondary level. However, these patterns were not found in earlier SASS data. From 1987–88 to 1993–94, teachers at middle schools became somewhat more likely to leave teaching within one year (4 percent in the former year versus 8 percent in the latter), yet comparable changes did not occur at the elementary or secondary levels.

School Climate

Teachers' Evaluations of Their Schools' Climate and Operations

Teachers were asked in SASS to express their degree of agreement with a broad range of statements about their school's climate, including aspects related to the principal, students, colleagues, and school conditions. The percentage of teachers agreeing with positive statements tended to decrease as school level increased, while the percentage agreeing with negative statements increased with level. Despite high rates of teacher agreement overall with the following positive statements, for example, teachers at the higher levels were less likely to agree that teachers participate in most of the important educational decisions, that they receive a great deal of parental support, that the administration's behavior is supportive and encouraging, that they try to coordinate course content with colleagues, and that the principal makes expectations for staff clear. Complementing this pattern, for the following three negative statements, teachers' likelihood of agreeing increased with level: that the principal does a poor job of getting resources (fewer than 20 percent at any school level); that they sometimes have to follow rules that conflict with their best professional judgment; and that they sometimes feel it is a waste of time to do their best as a teacher (in the range of roughly 20 and 30 percent for the latter two statements).

Teacher Satisfaction[3]

At least 77 percent of teachers at each of the school levels reported that they were satisfied with their job overall, with higher rates of satisfaction reported by elementary school teachers. Similar proportions of elementary, middle, and secondary school teachers reported satisfaction with their salary, opportunity for advancement, and support/recognition from administrators. However, teacher satisfaction with other aspects of their jobs varied with level. In 1994–95, the percentage of teachers who were satisfied with two aspects of their jobs decreased as school level increased: the caliber of their colleagues and the availability of resources, materials, and equipment. Middle and secondary school teachers reported lower rates of satisfaction with the intellectual challenge of their job than did teachers at elementary schools. In contrast, middle and secondary school teachers

[3]Job satisfaction was analyzed only for teachers who remained at the same job one year after the SASS data were collected. This restriction was necessary because school level was known only for that group. However, it should be pointed out that these data are likely to overstate satisfaction rates, because teachers who leave teaching (and perhaps also those who change schools) probably tend to be less satisfied than those who stay at the same job.

were more satisfied than elementary school teachers with their teaching load.

Teachers' and Principals' Ratings of Problems

Teachers and principals were asked to rate a number of possible problems at their school as serious, moderate, minor, or not a problem. In 1993–94, the percentage of teachers and principals who considered many of these problems serious increased with school level. This was true for student apathy, students' arriving unprepared to learn, the lack of academic challenge, the lack of parent involvement, robbery/theft, and student alcohol use. Middle school teachers were the most likely to report physical conflicts among students as a problem (11 percent), though it was not a particularly widespread problem. Student disrespect for teachers was cited by twice the percentage of teachers at middle and secondary schools as at elementary schools. Principals were less likely than teachers to view each problem as serious, except for poverty.[4] This was true for middle schools but also for all schools as a group. This discrepancy may result partly from teachers' having more direct contact and interaction with students each day and with a larger number of students, compared with principals.

Conclusion

Across the issues examined here with SASS and TFS data, middle schools rarely differed dramatically from elementary or secondary schools. It is possible that with data on other topics, particularly certain qualitative measures, middle schools would stand out more from other schools. Middle schools focus on serving the needs of young adolescents but otherwise share many of the same conditions, constraints, goals, and strengths of other schools. As they open new middle schools and reform existing ones, educators strive to adapt what works well at other levels to a school environment shaped for young adolescents. The overarching similarities across school levels that result should come as no surprise. Where middle and secondary schools share characteristics and differ from elementary schools, the development of middle schools along the secondary school model may provide some explanation. For other patterns, related variables such as school size may be relevant.

Five patterns characterize the data on middle schools vis-à-vis other schools. In the first, which occurred with some frequency, middle and secondary schools shared characteristics but differed from elementary schools. For example, a substantial majority of teachers in both middle and secondary schools teach in departmentalized settings. Middle and secondary school teachers generally have more specialized training in one or more subjects compared with elementary teachers. Middle and secondary schools were about twice as likely as elementary schools to report great difficulty filling teaching vacancies, perhaps partly because the requirements for teaching many of the subjects are more specific.

In the second pattern, middle schools are more similar to elementary than to secondary schools. Because elementary and middle schools tend to organize their classes differently, this pattern of similarity is relatively rare. Among these occurrences, middle and elementary school teachers were more likely to team teach their classes than teachers at the secondary level. Principals provide another example: at the lower two school levels, they viewed student absenteeism and alcohol use

[4]These discrepancies between teachers' and principals' opinions were noted in an earlier report, Henke, Choy, Geis, and Broughman 1996, 103.

as much less widespread problems than at secondary schools.

The third pattern, appearing with quite a few aspects of schooling, was a fairly steady increase or decrease in the prevalence of characteristics by school level. For example, for inservice programs on teaching methods, in-depth study of their subject, and student assessment methods, teachers were less likely to participate in training as school level increased. The proportion of teachers who thought they had a lot of influence on setting discipline policy decreased notably as school level increased, while their perceived influence on establishing curriculum increased with school level. The percentage of teachers who agreed with many negative statements about their school's climate and management (and who disagreed with several positive statements) or who viewed numerous school problems as serious increased with level.

When middle schools stood out as the exception from both elementary and secondary schools, such differences tended to be small. As an illustration, departmentalized middle school teachers of mathematics, science, English, and social studies were more likely than their secondary school counterparts to lack certification in that field. Middle school teachers were also slightly less likely than those at other levels to remain teaching at the same school the following year. Teachers were more likely to report that two problems—physical conflicts among students and student disrespect for teachers—were serious at middle schools than at the other two levels.

Finally, in some areas, particularly those related to provision of services and school management, there were no differences between the various school levels. For example, more than 90 percent of schools at each level provided programs to prevent drug and alcohol use among students, and nearly all schools had a library media specialist on staff. Similarly, principals at each school level were equally likely to think that they had a lot of influence over evaluating teachers' performance and determining the content of inservice training programs. Teachers reported similar rates of satisfaction with their opportunity for advancement, their salary, and the school administration's support and recognition.

Future Research

The questionnaires for the upcoming 1999–2000 SASS (and 2000–01 Teacher Follow-up Survey) include most of the items used in the earlier questionnaires. Once these data become available, many of the aspects of schooling discussed here can be examined over a 12-year period. The upcoming surveys also include new items that address additional policy issues that have come to the fore more recently. New or expanded topics in the 1999–2000 survey that may provide information relevant to middle-level education include the uses of schoolwide performance reports; tracking progress on school improvement plans; new teacher preparation and support in the school and professional development; ability-based tracking and grouping within classes; parent involvement; charter schools; and use of computers and other technology in the school. These new SASS data, which are planned for release in 2001, will provide opportunities for a range of additional comparative analyses among elementary, middle, and secondary schools.

Foreword

This report explores characteristics of and conditions in public middle schools in the United States, comparing these schools to elementary and secondary schools and examining changes in middle schools over a six-year period. Educators and researchers have directed fresh attention to middle-level education in recent years. On one end of the educational spectrum, educators have expended a great deal of effort to reform and improve high schools in the past decade or two; similarly, initiatives to strengthen early childhood education and expand access to preschool have taken hold. Complementing this work, middle schools have received new attention, particularly as some research has identified early adolescence as the time when student drift, alienation, and underachievement in school often begin. The recognition of middle schools as a key bridge in the continuum of schooling has also focused research and practice efforts on the middle grades.

This report uses nationally representative data to examine differences and similarities across school levels, focusing on middle schools. Included are, on the one hand, objective measures such as program provision, classroom organization, professional development participation of staff, and the handling of teaching vacancies. Subjective data are also presented, including principals' and teachers' perceptions of their influence over various areas, their views on school climate and problems, and teachers' job satisfaction. The Schools and Staffing Survey (SASS) has collected data on a wide range of topics about schools, teachers, principals, and their experiences at work across the United States in 1987–88, 1990–91, and 1993–94. The Teacher Follow-up Survey (TFS), conducted a year after each administration of SASS with a subset of the teachers from SASS, examines such issues as teacher retention, mobility, and attrition rates, and teachers' satisfaction with aspects of their jobs. While the report primarily analyzes data from the most recent available year, some attention is also given to trends over the six years encompassed by the data. The questionnaires for the upcoming 1999–2000 SASS (and 2000–01 Teacher Follow-up Survey) include most of the items used in the earlier questionnaires, as well as new and expanded items. Once these data become available, many of the aspects of schooling discussed in this report can be examined over a 12-year period.

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1. Introduction

Educators, parents, policymakers, and researchers have focused considerable attention on middle-level education in recent years, prompted by two widely held concerns: first, that middle schools have lacked academic rigor and, second, that they have contributed insufficiently to the psychosocial development of early adolescents. As a result, many middle school educators have renewed efforts to develop curricula and instructional strategies that challenge students academically and expand their intellectual interests; to ensure that teachers receive appropriate training to meet the needs of this age group; and to create more nurturing and supportive environments.

This report uses data from the Schools and Staffing Survey (SASS), conducted in 1987–88, 1990–91, and 1993–94, and the accompanying Teacher Follow-up Survey (TFS), conducted a year after each administration of SASS, to describe various aspects of middle schools, to examine how they have changed over time, and to compare middle schools with elementary and secondary schools. These data provide information on fundamental dimensions of school organization; programs and services; decision making and management; staffing matters; instructional practices; and school climate. The tables, which follow the discussion, present detailed information on elementary, middle, secondary, and combined schools and on selected grade configurations at the middle and secondary levels. In addition to providing descriptive information on middle schools, this report explores the prevalence of some widely recommended practices and conditions in elementary, middle, and secondary schools. To place the analysis in context, the report begins with a brief overview of the history of the middle school movement and current policy concerns relevant to middle schools.

Only public schools are included; because middle schools are rare in the private sector, there were too few cases of private middle schools in the SASS data set to analyze. Comparisons are not made between combined schools and schools of other levels because combined schools do not belong to a single level; by definition they include grades from more than one level. Finally, although the detailed tables include breakdowns of three grade configuration categories for middle schools and two for secondary schools, these subcategories have generally not been examined for differences because of small sample sizes.

Policy Issues Related to Middle Schools

The notion that early adolescents have social, psychological, and academic needs that are distinct from those of older and younger students has long been recognized. Junior high schools, typically containing grades 7 through 9, were first established around the turn of the 20th century because the upper grades of primary schools were seen as failing to meet the needs of early adolescents (Clark and Clark 1993).[1] Reformers at the time advocated presenting more challenging academic content (to reduce student dropout rates) and introducing exploration of various vocational fields (to prepare students who did not plan to attend high school for useful work). In addition, reform-minded educators searched for ways for schools to address the developmental needs of young people as well as stimulate their intellectual growth (Clark and Clark 1993).

The rapid growth of junior high schools later generated several waves of criticism, some in response to intended reforms that were not fully implemented and some in response to the consequences of realized reforms. Some attacks made in the 1940s remain familiar today: fragmented curriculum taught in departmentalized classes (as in high schools); heavy emphasis on teacher lectures and students' passive observation; predominant reliance on textbooks; tracking students by ability; and inadequate teacher training (particularly in the area of adolescents' psychosocial, emotional, and cognitive development).[2]

The current middle school reform movement began in the 1960s, with many of the same aims that underlay the earlier creation of junior high schools. One difference is that a slightly younger age group has been targeted for middle schools—as young as 10 years old (or 5th grade) in some schools, reflecting the earlier onset of puberty compared with a century ago. Despite incremental changes in organization, curriculum, and instruction since then, critics in recent years charge that too many schools educating early adolescents, especially those in central cities, still tend to resemble the junior highs they were supposed to reform (Cuban 1992, 46).

Perhaps the most pivotal concern raised in recent years is that middle-level schools lack academic rigor. Among many who accuse middle schools of failing to develop in students the high-level thinking skills that they need for high school and college work are Tucker and Codding (1998), who recently called middle schools "the wasteland of our primary and secondary landscape." Specific criticisms of those who decry the lack of academic progress among middle-level students (Ames 1998; Carnegie Council on Adolescent Development 1989; McEwin, Dickinson, and Jenkins 1996; Argetsinger 1999) include the following:

[1]Clark and Clark cite earlier analysts of the middle-grades problem, including Hansen and Hern 1971, Briggs 1920, and Koos 1927.

[2]Douglass 1945, cited by Cuban 1992.

- A lack of curricular focus on core academic courses and analytical skills leads students to shift their focus away from school and even become alienated from it, and ill prepares them for either high school or meaningful employment;
- Teachers lack appropriate training to teach young adolescents, to teach challenging material and high-level skills, or both; and
- The dramatic increase in ability grouping (often called tracking) as children enter middle school restricts at-risk students' access to challenging curricula and contributes to their subsequent low achievement.

Some critics contend that overemphasizing young adolescents' social, psychological, physical, and emotional needs has actually contributed to schools that do not challenge students sufficiently in their academic work. Junior high schools had responded to charges in earlier decades that they were insensitive to these psychosocial needs, but some think they went too far in finally addressing them. One middle-level education expert noted recently that in striving to be supportive and build confidence, many middle schools have failed to emphasize high-level academic skills and hold students and teachers accountable for meeting high standards.[3] Ames (1998) wrote that "while many middle-grades schools have created safer and more nurturing environments, . . . [a]cademic expectations are generally low, and opportunities for students to learn important concepts and apply them to real-world problems are rare."

Although elementary and high schools are often faulted for similar deficits in academic rigor and depth, test data highlight the middle grades as the point when average student achievement begins to lag. The Third International Mathematics and Science Study (TIMSS), conducted in 1997, provides useful comparative data from the United States and up to 40 other countries[4] on student achievement levels in mathematics and science in the 4th, 8th, and 12th grades. These data show that U.S. 4th-graders scored above the international average of 26 nations in mathematics and that they performed below students in only 7 other countries (U.S. Department of Education 1997). However, by 8th grade, U.S. students' mathematics performance fell below the international average (of 41 nations) and below that of 20 nations. The TIMSS study also found that curriculum taught in U.S. 8th-grade mathematics classes was less advanced than that taught in Germany or Japan. German and Japanese students spent considerably less time on arithmetic topics and more time working on algebra and geometry than U.S. students did.

Performance on tests of science knowledge echoed the pattern in mathematics, although U.S. students' relative achievement levels in science were generally better than those in mathematics. In the United States, 4th-graders scored above the international average of 26 nations in

[3]Nancy Doda, quoted in Argetsinger 1999.

[4]The exact number of countries from which test data were available differed depending on the grade level and subject. The nations were for the most part either developed or newly industrializing; very few belonged to the "developing" world.

science and performed less well than students in only 1 other country, Korea. But while U.S. 8th-graders also tested above the international average of 41 nations in science, their performance fell below that of 9 nations. Furthermore, the slowing of progress apparent on 8th-grade tests is not a temporary lull that is erased in the later grades. According to a summary of the TIMSS findings, U.S. 12th-graders scored below the international average in both the mathematics and science general knowledge tests, which measure a range of skills and knowledge learned over the course of K–12 schooling. In addition, achievement of U.S. 12th-graders on these general knowledge tests was among the lowest of the 21 participating nations.[5]

Another group of educators, who often oppose the "academics first" group, argue that middle schools still have work to do to meet students' multifaceted needs for growth in the social, psychological/emotional, physical, and cognitive realms. There is a long tradition of such recommendations; one example is the recent recommendation that schools shift from a "culture of service" to a "culture of caring."[6] Such critics tend to believe that middle schools, whatever their progress in the academic arena, are still not effectively meeting young students' needs for support, acceptance, and developing strong self-esteem. In recent years, these concerns have reached greater prominence as the media, educators, and parents examine incidents of extreme violence in the middle grades.

An influential report issued in 1989, *Turning Points: Preparing Youth for the 21st Century*, included comprehensive recommendations that stressed the need for middle schools to take action in both the academic and psychosocial arenas (Carnegie Council on Adolescent Development 1989). Other educators concur that school activities need to emphasize mastery of skills and content as well as address students' feelings and develop their self-confidence (Lipsitz, Jackson, and Austin 1997; Madhere and Mac Iver 1996). Some of the policies and practices recommended for middle schools in *Turning Points* can be addressed with SASS data to at least some extent.

- Create small communities for learning (e.g., schools-within-schools, student/teacher teams, and small group advisories) to foster close relationships between teachers and students, and among students. The goals include creating a climate for intellectual growth that encourages curiosity as well as reducing alienation and intimidation. Teachers need sufficient time with students to unravel each one's particular needs, to inspire them to use their gifts, and to break down any obstacles to learning.
- Ensure that all students gain a core of knowledge and skills. Practices that support this goal include staff cooperatively selecting the most central skills and content, integrat-

[5]U.S. Department of Education 1997.

[6]See, for example, Ryan and Friedlaender 1996. These authors cite earlier observers such as Dewey 1915; Gruhn and Douglass 1947; Tye 1985; and Gutmann 1987.

ing curriculum, developing students' critical reasoning and higher order thinking skills, and educating students for active citizenship.

- Empower school staff to make decisions to guide the most effective teaching for their students, including developing site-based governance committees, increasing teachers' autonomy, creating leadership positions such as mentor teachers, and changing the role of school principals.
- Improve middle-grade teacher preparation by encouraging more targeted education (prospective teachers should concentrate in one or more core subjects as undergraduates and complete substantial coursework in early adolescent development and guidance); teacher internships or apprenticeships under mentor teachers' supervision; and specialized certification/licensing for teaching the middle grades in addition to elementary- or secondary-level certification.
- Foster the health, fitness, and safety of young adolescents. To help achieve this goal, provide health services, including substance abuse counseling, mental health treatment, and reproductive health counseling and services; diverse athletic programs; and conflict resolution/violence avoidance programs.

In addition to these goals, the authors of *Turning Points* set forth two others: the first is promoting high achievement by all students, which they thought would be helped by avoiding "tracking" students by ability, implementing cooperative learning and cross-age tutoring, and providing tutoring and a range of extra support activities for students who need them. The second is developing ties with the community. Activities recommended in this area include communicating with parents regularly, building trust, and encouraging them to serve on school governance bodies; placing students in volunteer service to the community; and leveraging community resources like businesses, religious and community-based organizations, and youth agencies—any of which may provide mentors, tutors, equipment, financing for special projects, or student placements.

Many of the administrative changes (such as block schedules or other scheduling flexibility) proposed in *Turning Points* have been adopted by some schools; in fact, schools may be farther ahead in changing administrative features than in reforming instruction and curriculum (Mergendoller 1993; Felner, Jackson, Kasak, Mulhall, Brand, and Flowers 1997). While changes in school organization or administration may help students make connections with teachers and other students as they adapt from smaller elementary schools to middle schools, such changes are often too superficial to influence student learning notably. To improve student outcomes on a sustained basis, it is usually necessary to make difficult and fundamental changes in many parts of the educational enterprise. Examples of such reforms are stronger teacher preparation and in-service training; providing adequate planning time and flexible schedules; implementing student-driven activities such as multifaceted projects and cooperative learning methods; using alterna-

tive student assessment methods; providing tutors and mentors; and establishing higher learning standards and more demanding curriculum.[7]

[7]Cuban is one proponent of this view; see his 1992 article cited above. Cited by Felner et al. 1997.

2. Organization of Schooling

How schools are organized can affect student achievement, and considerable effort has been directed to investigate which classroom and school organizational structures best serve students in the middle grades. After defining school levels and presenting the numbers of schools and students at each level, this section describes school location and size, how instruction is organized (in departments or self-contained classes), and class size.

Definitions of School Levels

There is no single generally agreed-upon definition of "middle school." The National Middle School Association (NMSA) purposely avoids defining middle schools by grade configuration; instead it concentrates on the goals, activities, and organizational attributes of the schools that serve 10- to 14-year-olds. From the NMSA's perspective, middle schools are defined as those that are specifically structured to meet young adolescents' particular developmental needs (McEwin, Dickinson, and Jenkins 1996).

The Schools and Staffing Survey (SASS) data do not allow schools to be categorized by whether they have adopted a philosophy or goals like the NMSA's but do support definitions based on grade range. Middle schools include some of the grades from 5 through 8, those in which early adolescents are concentrated. In this report, school levels were defined as follows:[8]

Elementary	Schools with at least one grade lower than 5 and no grade higher than 8.
Middle	Schools with no grade lower than 5 and no grade higher than 8.
Secondary	Schools with no grade lower than 7 and at least one grade higher than 8.
Combined	Schools with at least one grade lower than 7 and at least one grade higher than 8. Schools with only ungraded classes (no grades reported in K–12) were included with combined schools.

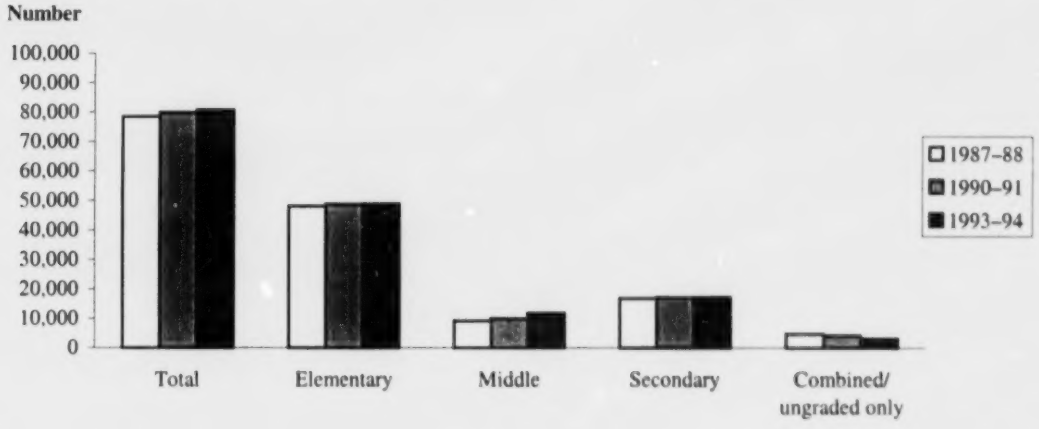
[8]Previous publications that use SASS data have generally used different definitions of school level. For example, *Schools and Staffing in the United States: A Statistical Profile: 1993–94* and its two predecessors used two school levels, elementary and secondary (plus the residual category for combined). While the definitions of combined schools are identical, the definitions of elementary and secondary schools differ because of the inclusion of middle schools. This report places many schools previously categorized as elementary and a smaller number previously categorized as secondary in the middle schools category.

Numbers and Distributions of Schools and Students

In 1993–94, there were 80,740 public schools in the United States, of which 11,712 were middle schools (table 1). (All tables appear following the end of the text.) In that year, 60 percent of all public schools were elementary schools, 21 percent were secondary, and about 15 percent were middle schools (the remaining 4 percent were combined schools) (table 2). The trend toward establishing middle schools, especially those with grades 6–8, is growing. The number of middle schools increased from 9,086 to 11,712 between 1987–88 and 1993–94, while the number of elementary and secondary schools remained about the same (figure 1).[9] The growth occurred almost solely among schools with the grade 6–8 configuration; the number of middle schools with other grade ranges was similar in both years (figure 2). The number of secondary schools with grades 7–9 (the traditional junior high configuration) declined from 2,011 in 1987–88 to 1,263 in 1993–94 (table 1).

The common configuration of grades 6–8 accounted for 59 percent of all middle schools in 1993–94 (table 2). Another 23 percent of middle schools contained grades 7–8, and the remaining 18 percent had other configurations.[10] Of the 6.8 million students enrolled in middle schools

Figure 1—Number of schools of different levels: 1987–88, 1990–91, and 1993–94

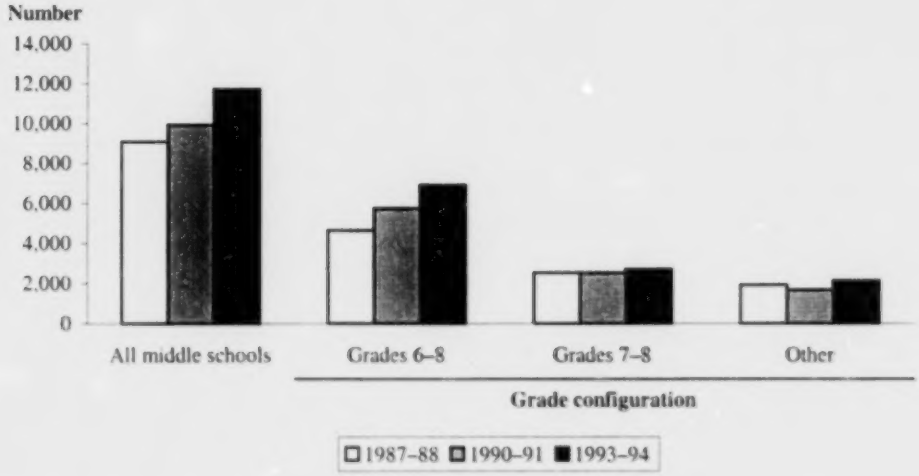


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1987–88, 1990–91, and 1993–94.

[9]All comparisons in this report are statistically significant at the 0.05 level. For a full discussion of the statistical methods used in this report, see appendix C.

[10]Some districts may create schools with the less common grade configurations for pedagogical reasons, and others may do so because of constraints imposed by their physical facilities. In addition, districts sometimes create schools with certain configurations on a temporary basis, as they build new schools or shift from one overall organization of grades to another.

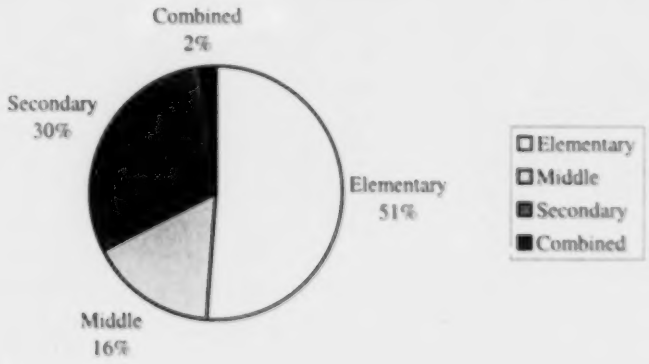
Figure 2—Number of middle schools, by grade configuration: 1987–88, 1990–91, and 1993–94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1987–88, 1990–91, and 1993–94.

in 1993–94, 4.4 million were enrolled in schools with grades 6–8 (table 3). Another 1.4 million students were enrolled in 7th- through 8th-grade schools, and the remaining 1 million were enrolled in middle schools with other grade configurations. About half of the nation's public school children attended elementary schools in 1993–94, 30 percent attended secondary schools, and 16 percent attended middle schools (figure 3).

Figure 3—Percentage of students in schools of different levels: 1993–94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1993–94.

Location of Middle Schools

The ability of districts to establish middle schools is constrained by the size of the student population in particular age ranges and, often, the school buildings available (or the availability of funds for new construction in areas with population growth). Middle schools are less likely to be found in very small districts, which tend to have less flexibility to configure their schools as desired, than in larger ones. In 1993–94, 10 percent of schools in districts with fewer than 1,000 students were middle schools, in contrast to 16 percent of schools in medium-sized districts and 14 percent in districts with 10,000 or more students (table 2). Middle schools with the grade 6–8 configuration were more common in large districts (those with 10,000 or more students) than in medium-size or small districts. In contrast, middle schools with grades 7–8 were more common in the smallest districts (those with fewer than 1,000 students) than in medium-size or large districts.

Middle schools accounted for a similar proportion of all schools in each community type, while schools of the other two levels were distributed unevenly. Different regions of the country also had similar proportions of middle schools in 1993–94—roughly 15 percent of all public schools were middle-level schools in each of the four regions (Northeast, Midwest, South, and West).

Size and Other School Characteristics

About two-thirds (69 percent) of all middle schools had 150–749 students in 1993–94 (table 4); they generally tended to fall between elementary and secondary schools in size. Middle schools were more likely than elementary schools, but less likely than secondary schools, to have 750 or more students in 1993–94. A recent study suggests that large schools serving young adolescents are likely to have lower levels of engagement in the learning process than smaller schools (although no specific size was recommended as optimal).[11]

Certain school characteristics appeared more often and affected more students at the middle school level than at other levels. For example, 56 percent of middle school students attended schools with 20 percent or greater minority enrollment in 1993–94, while about one-half of both elementary and secondary school students attended such schools (table 5). This small difference may reflect middle schools' tendency to be located in fairly large (and likely more diverse) dis-

[11]Lee and Smith 1993, 164–187. Note, however, that because this study used 8th-grade enrollment size as a proxy for school size, it provided no information on which particular school size may be detrimental or beneficial.

tricts. Most middle schools, 88 percent, were located in districts with at least 1,000 students (table 4).

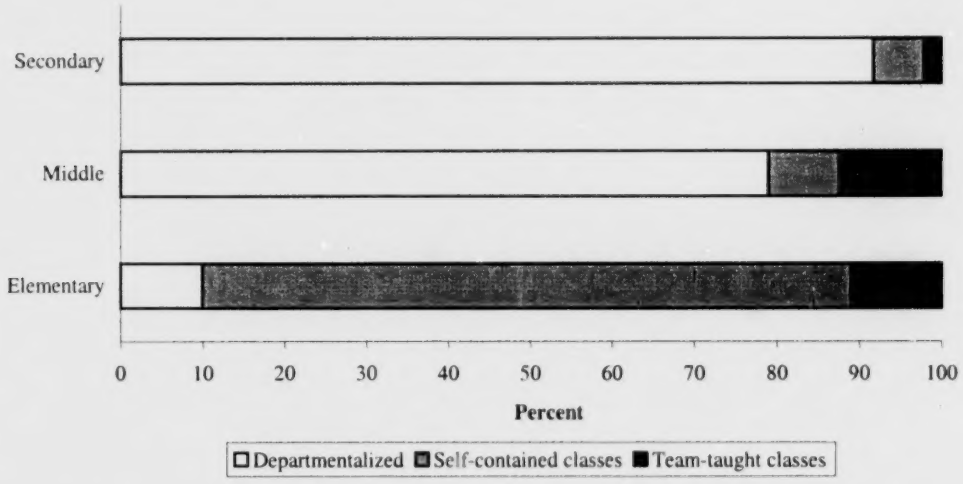
Many educators consider it beneficial for minority students to have minority principals and teachers to enhance communication and serve as role models (Stewart, Meier, LaFollette, and England 1989; King 1993; Graham 1987; Adair 1984). Similarly, children may benefit from seeing women hold positions of authority (Diamond 1978; Kahle 1984)—for example, serving as school principals. Some variation by level existed in the 1990s in the percentage of students attending schools with either minority principals or at least 20 percent minority teachers. In 1993–94, middle and elementary school students were somewhat more likely than those at secondary schools to attend a school headed by a minority principal (about 20 percent for middle and elementary versus 15 percent for secondary school students). The percentages of students who attended schools in which at least 20 percent of the teachers belonged to a racial/ethnic minority were similar at the middle and elementary levels (about 27 percent) and lower at the secondary level (20 percent). Students were decreasingly likely to have a female principal as their school level increased, however: in 1993–94, 46 percent of all students in elementary schools had female principals, compared with 28 percent of those in middle schools and 15 percent of those in secondary schools.

Classroom Organization and Class Size

The way that schools organize instruction has many implications for student learning and other outcomes. Among the response options provided by SASS, three types of class organization are discussed here and included in table 6: self-contained, departmentalized, and team-taught classes. Elementary schools are usually organized around self-contained classes, where children work with the same teacher for all or nearly all subjects. The self-contained structure allows a teacher to know the students well and to track their progress closely. In contrast, secondary schools are usually organized in departments in order to provide teachers who are thoroughly trained in specific subjects and to give students some choice of courses. Middle school reformers have searched for creative ways to combine the advantages of both approaches.

Middle school students grappling with rapid physical, emotional, and intellectual changes require a nurturing environment that encourages maturation, prompting some reformers to recommend self-contained classrooms or student/teacher teams in middle schools. In practice, middle schools most often use the departmentalized model, in which teachers specialize by subject area and students move from one class to another, working briefly with several teachers each day. Close to 80 percent of middle school teachers taught in a department in 1993–94, making middle schools similar to secondary schools in this respect (figure 4 and table 6). At the secondary level,

Figure 4—Percentage of teachers with different types of classes, by school level: 1993–94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Teacher Questionnaire): 1993–94.

by far the dominant mode of class organization was departmentalized (92 percent of teachers taught in a department), and self-contained classes were rare (6 percent of teachers had a self-contained class).

These data are consistent with the assessment by Lee and Smith (1993) that middle-grade schooling has generally followed the bureaucratic model characteristic of comprehensive high schools, which relies on a rigid and hierarchical departmental structure: department heads make many key decisions related to instruction, staff roles and tasks are highly specialized and rule bound, and student achievement determines class assignment.[12] These researchers find bureaucratically organized schools less likely to produce high student achievement than schools organized on the "personal-communal" model, in which teachers make most of the important decisions about teaching their students in small learning communities, elements of teacher teaming (such as common planning time and nontraditional schedules) exist, ability-based tracking is eliminated, and all students are required to complete the same core academic courses.

[12]The SASS data cannot shed light on other aspects of the bureaucratic model, only the use of departmentalization. Nor do the SASS data provide any information on other strategies that schools may have adopted to create more intensive student-teacher contact despite departmentalization of instruction.

Team teaching, in which two teachers plan and teach a class together, can be one element of the personal-communal model.[13] By increasing teachers' contact with each group of students and strengthening bonds, it may promote better learning. Team teachers usually come from different disciplines and integrate material from their particular curricula; often, double periods are scheduled to cover the integrated content. Team teaching is a strategy thought to be effective in increasing teachers' enthusiasm and students' learning, for example, by allowing teachers to complement each other's strengths and by eliminating artificial boundaries between subjects (Madhere and Mac Iver 1996; Drake 1993; Rahn, Alt, et al. 1995; Bottoms and Sharpe 1996). However, team teaching is relatively rare in schools because of the administrative and personnel obstacles frequently encountered in implementation. About 12 percent of middle school teachers taught in teams in 1993–94; in this regard, middle schools were similar to elementary schools, in which 11 percent of teachers team taught.

Teachers in middle schools with a 6th- through 8th-grade or other grade configuration were more likely than those in schools with grades 7–8 to team teach. The relative favoring of team teaching in 6th- through 8th-grade schools, the most common configuration for middle schools, may reflect the recommendation of middle school reformers for teacher teams and other approaches to increase communication and connections with students. In both elementary and middle schools, teachers were more likely to teach in teams in 1993–94 than they were in 1987–88.

Although the predominant mode of classroom organization differs greatly by school level, class size, which is generally governed by state and/or school district policies, tends to differ little. The average size of elementary school self-contained classes was 24.1 students in 1993–94 (table 6), which was similar to the average for middle schools' departmentalized classes (24.7 students) but slightly larger than the average for departmentalized classes in secondary schools (22.7 students).

[13]Team teaching, one of the SASS categories of class organization, means that pairs of teachers assume joint responsibility for a larger class and integrate the material—for example, a combined mathematics and science class. However, there are other forms of teaming—for example, a structure called student/teacher teams, in which several teachers usually cover the core academic subjects in separate departmentalized classes, working as a team with a group of about 80 to 120 students.

3. Programs and Services

The Schools and Staffing Survey (SASS) collected information on two general categories of school programs and services: those that support instruction and those that protect or improve student health. Because the programs and services that schools offer reflect the needs of the populations they serve and differences in the way instruction is organized, many of them vary by level.

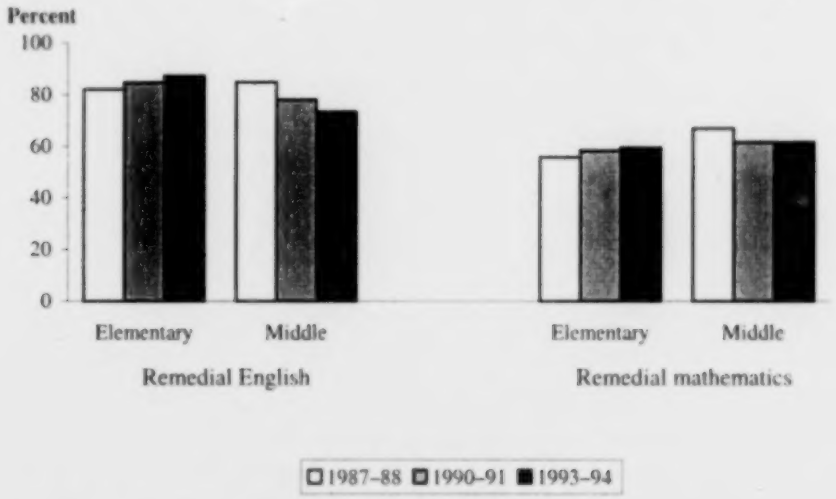
Instruction-Related Services

Certain kinds of instruction-related programs and services were offered by a higher proportion of middle schools than secondary schools in 1993–94 (table 7). Programs in this category included those for gifted and talented students (79 versus 65 percent) and English as a Second Language (ESL) instruction (49 percent versus 37 percent). These differences may reflect varying needs and different approaches to addressing those needs at different school levels. For example, middle schools may serve high achievers through programs for gifted and talented students, while secondary schools may use student tracking or offer honors/advanced placement courses instead. The more frequent provision of ESL instruction by middle schools than by secondary schools may reflect both the age distribution of children who lack English skills when they start school or arrive in the United States and a decreasing need for English instruction as students complete more schooling and gain language proficiency.

Other services, aimed primarily at meeting the needs of younger students, were offered by a smaller percentage of schools as level increased. Such services included remedial reading (offered by 87 percent of elementary schools, 74 percent of middle schools, and 69 percent of secondary schools) and Chapter One compensatory education programs (offered by 74 percent of elementary schools, 51 percent of middle schools, and 34 percent of secondary schools).

Some notable shifts occurred in the frequency with which middle schools offered certain services from 1987–88 to 1993–94. During this period, the percentage of middle schools offering remedial reading or English declined from 85 to 74 percent (figure 5). Similarly, a slightly smaller percentage of middle schools provided remedial mathematics instruction in 1993–94 (62 percent) than did six years earlier (67 percent). These changes were accompanied by increases in the percentages of elementary schools providing remedial instruction in these subjects. These

Figure 5—Percentage of elementary and middle schools that offered remedial English and remedial mathematics instruction, by school level: 1987–88, 1990–91, and 1993–94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1987–88, 1990–91, and 1993–94.

shifts suggest that school systems may be purposely addressing learning difficulties at younger ages, or they may be adopting approaches other than specifically identified remedial courses for serving middle school students who need academic assistance.

In addition, mirroring a change at public schools as a whole, ESL was offered by more middle schools in 1993–94 than in 1987–88 (49 percent versus 41 percent), while bilingual programs were offered by a somewhat lower percentage of middle schools in 1993–94 than six years earlier (18 percent versus 22 percent). The trend over time toward favoring ESL over bilingual programs was consistent across school levels. In contrast, the changes in remedial instruction involved a shift in providing these services from one school level to another.

Health-Related Services

Schools are often called upon by their communities to offer various health-related services. Good health is necessary for most students to do their best work, and integrating health services was recommended by the educators and political leaders who wrote *Turning Points* (Carnegie Council on Adolescent Development 1989). Because some services are equally likely to be needed by students at any age, they tend to be offered by about the same percentage of schools at

all levels. General medical care was provided by roughly 60 percent of all schools, and diagnostic services by roughly 82 percent in 1993–94 (table 8). At least 90 percent of the schools at each level had programs to prevent drug and alcohol use among students.

In contrast, the demand for substance abuse counseling tends to increase with student age. Indeed, recent research has pinpointed middle school as the stage when many students first succumb to peer pressure and begin using cigarettes, alcohol, or illegal drugs (Wren 1999). Reflecting this situation, the proportion of schools providing substance abuse counseling increased with school level. At least 50 percent of middle and secondary schools provided this service in 1993–94, compared with 26 percent of elementary schools (figure 6 and table 8).

Figure 6—Percentage of schools that offered various health-related services, by school level: 1993–94

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1993–94.

4. Decision Making and Management

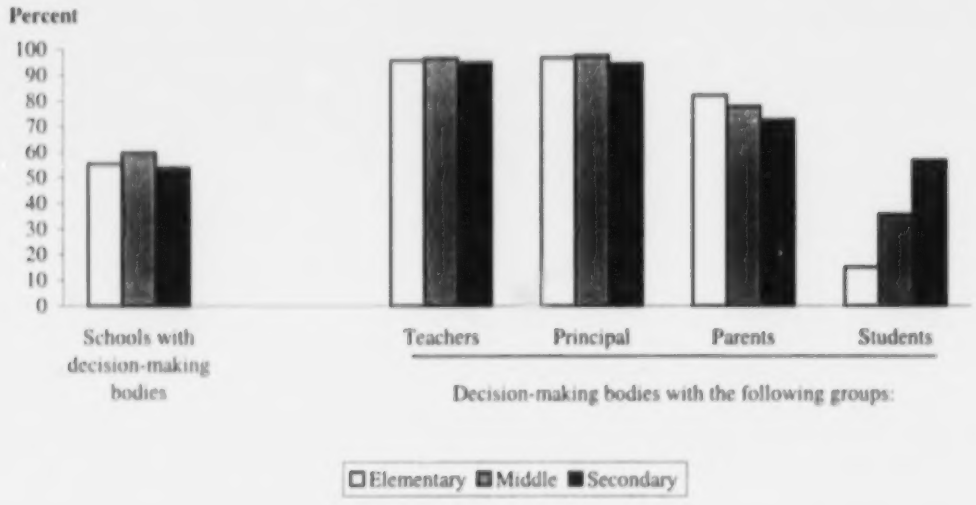
Greater involvement by school staff, parents, and students in governing the school was a core recommendation of the authors of *Turning Points* (Carnegie Council on Adolescent Development 1989). They argued, "Deeply ingrained in our society is the belief that individuals can be trusted to make decisions for themselves and for the common good. . . . Democratization may be entering the American workplace, but it has not yet penetrated American public education." Sharing decision-making power, these authors believed, increases teachers' and principals' motivation and the quality of their work. Methods of encouraging teachers' input and control over decisions about their schools (as well as those of parents, students, and other community members) include using site-based decision-making bodies. The Schools and Staffing Survey (SASS) data cover whether schools have site-based governing bodies, which individuals and groups participate in them, and which responsibilities these bodies assume. The amount of influence that principals and teachers believe they have over various aspects of their schools provides an additional perspective on governance and shared decision making. Both topics are discussed in this section of the report.

Site-Based Decision Making

Site-based decision making has been proposed as one way to increase active participation in school governance by teachers, parents, community members, and even students. Many believe that the more these individuals can express their ideas and opinions and become actively involved in implementing them, the more motivated and committed they will be to improving school effectiveness (Leithwood 1992; Carnegie Council on Adolescent Development 1989). One way to institutionalize such involvement is to create a site-based governing body and assign it some responsibilities that are normally the purview of one of the traditional governing bodies or leaders (school boards, district administrators, the principal or all school administrators jointly, the faculty, or the parent-teacher organization). This section examines which groups are most often included in these site-based management bodies and the areas of responsibility they are likely to assume.

Figure 7 and table 9 show that about 50–60 percent of all schools had a site-based management body in 1993–94. Of schools with such a body, nearly all (about 95 percent or more) included teachers and the principal or assistant principal(s). Parents were also heavily repre-

Figure 7—Percentage of schools that had site-based decision-making bodies, and percentage of those bodies that included various groups,* by school level: 1993–94



*The groups included as response options were teachers, principal, assistant/vice-principal, students, parents, superintendent/district representative, and other community representatives.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1993–94.

sented, though the percentage of schools with parents participating declined somewhat as level increased. This finding is consistent with teachers' reports that parent involvement drops off as school level increases (see discussion of teachers' ratings of problems in the School Climate section). An opposite trend occurred with students, who, as they mature, become more able to contribute effectively to such a group. Only 15 percent of site-based decision-making bodies at the elementary level included students, while 35 percent of those at middle schools and 57 percent of those at secondary schools did so.

The SASS school administrator questionnaire asked principals to report on whether their site-based management body addressed six broad school functions. As table 10 shows, certain issues were far more frequently addressed than others. Those most commonly addressed were considering input on curriculum or discipline issues (83 percent of all schools), school resource issues (75 percent of all schools), and aiding the principal with budgetary issues (66 percent of all schools). Approximately one-third of all schools' decision-making bodies conferred on school personnel issues or served as a district/school liaison on operational issues. The proportion of schools whose decision-making bodies worked on most of these functions did not differ greatly

by school level in 1993–94. However, about 80 percent of decision-making bodies at middle schools worked on school resource issues, more than those at elementary or secondary schools. Also, decision-making bodies at middle and elementary schools were more likely than those at secondary schools to work with the principal on budget or spending issues (roughly 68 percent versus 58 percent, respectively).

Principals' Perceptions of Their Influence

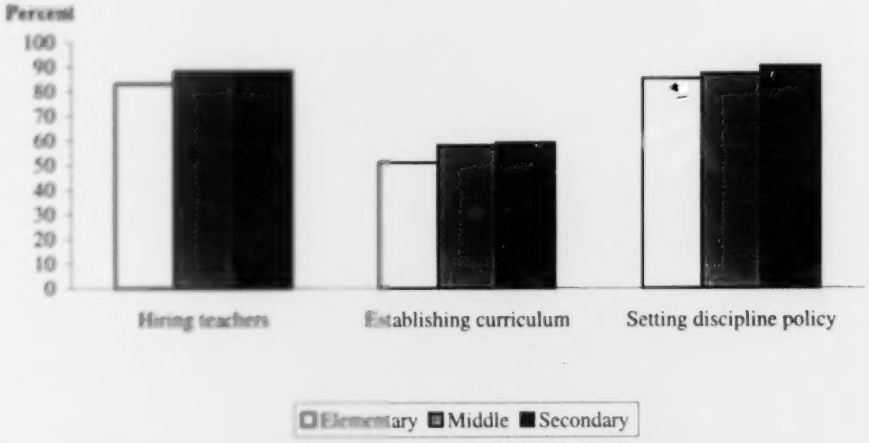
The levels of autonomy and influence that principals have may vary with factors such as controls set by the school district, the school's size, the principal's leadership style and skills, and the particular school-management issue under consideration. Principals' perceptions of their influence over six issues either did not differ by school level, or differed only slightly, in 1993–94 (figure 8 and table 11). Similar percentages of principals at each level reported that they had a lot of influence over evaluating teachers' performance (95 percent) and determining the content of inservice training programs (71–75 percent). At least 80–85 percent of principals at each level reported that they had a lot of influence over hiring full-time teachers and setting discipline policy in 1993–94 (figure 8). One-half or more of principals at each level reported that they had a lot of influence over establishing curriculum, with a somewhat lower percentage at elementary schools than at the other two levels.

At least 80 percent of middle school principals reported that they had a lot of influence over hiring full-time teachers and setting discipline policy in 1987–88. Despite this high level of reported influence, from that base year to 1993–94 these percentages increased (figure 9 and table 11). Comparable increases also occurred for all school principals. Over the same time period, in middle schools and in schools overall, principals' influence over curriculum fluctuated but did not change in a consistent direction. At least 50 percent of principals at each level reported having substantial influence over curriculum in 1993–94. (Data were not collected in earlier years for principals' influence over school budget decisions, determining the content of inservice training, or teacher evaluation.)

Teachers' Perceptions of Their Influence

Teachers were also asked to rate their influence over a range of school policies and practices. In 1993–94, as shown in figure 10 and table 12, at least 25–30 percent of teachers at each level thought that they had a lot of influence over three areas: establishing curriculum, determining the content of inservice training, and setting discipline policy. Ten percent or fewer thought they had a great deal of influence over school budget decisions, hiring full-time teachers, or

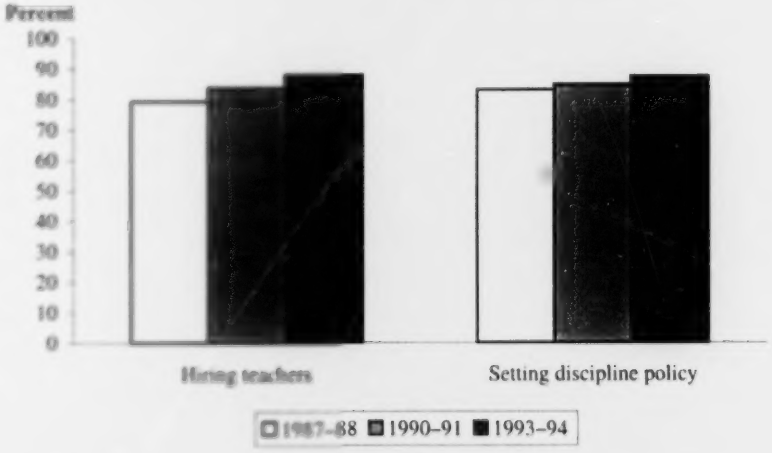
Figure 8—Percentage of principals who reported that they had a lot of influence* over hiring teachers, establishing curriculum, and setting discipline policy, by school level: 1993–94



*Ratings of influence are counted as "a lot" if respondents marked one of the highest two numbers (5 or 6) on a 6-point scale.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1993–94.

Figure 9—Percentage of middle school principals who reported that they had a lot of influence* over hiring teachers and setting discipline policy: 1987–88, 1990–91, and 1993–94

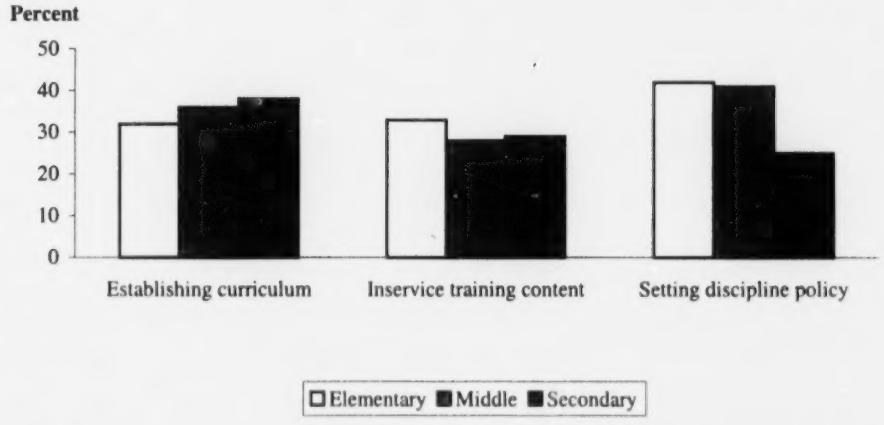


*Ratings of influence are counted as "a lot" if respondents marked one of the highest two numbers (5 or 6) on a 6-point scale.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

teacher evaluation. In the area of setting discipline policy, the percentage of teachers who thought that they had a lot of influence decreased notably as school level increased. About 42 percent of elementary school teachers reported that they had a lot of influence over setting discipline policy, while 31 percent at middle schools and 25 percent at secondary schools did so (figure 10). (As discussed in the School Climate section below, teachers were more likely to report that various student misbehaviors were problems at higher school levels.) An opposite pattern held for establishing curriculum, where teachers' estimates of their influence increased with school level. Involving teachers more extensively in devising curriculum at the higher school levels may partly reflect the extent to which coursework above the elementary school level is driven by subject-specific curriculum standards.

Figure 10—Percentage of teachers who reported that they had a lot of influence* over establishing curriculum, determining content of inservice training, and setting discipline policy, by school level: 1993–94



*Ratings of influence are counted as "a lot" if respondents marked one of the highest two numbers (5 or 6) on a 6-point scale.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

5. Staffing

Across all service-based sectors and industries, staff is the primary factor determining productivity and outcomes, and education is no exception. Because of the importance of staff preparation, skills, and morale, researchers and policymakers have continually scrutinized teacher preparation and effectiveness in their search for ways to improve students' learning. Measures of staffing such as preparation for the job, workload, the presence of professional support staff, and teacher retention and turnover form core components of the Schools and Staffing Survey (SASS) and the Teacher Follow-up Survey (TFS). This section examines the following aspects of staffing by school level: job qualifications of teachers and principals; how schools handle teaching vacancies; teachers' workloads; support from librarians and school counselors; and one-year rates of teacher retention, mobility, and attrition.

Qualifications of Teachers and Principals

While many aspects of teacher quality are difficult to measure, SASS data provide several objective indicators of teacher qualifications, including type of certification, education and experience, and participation in professional development activities. For principals, data are available on education and experience as school administrators as well as on special training for their jobs.

Teacher Certification[14]

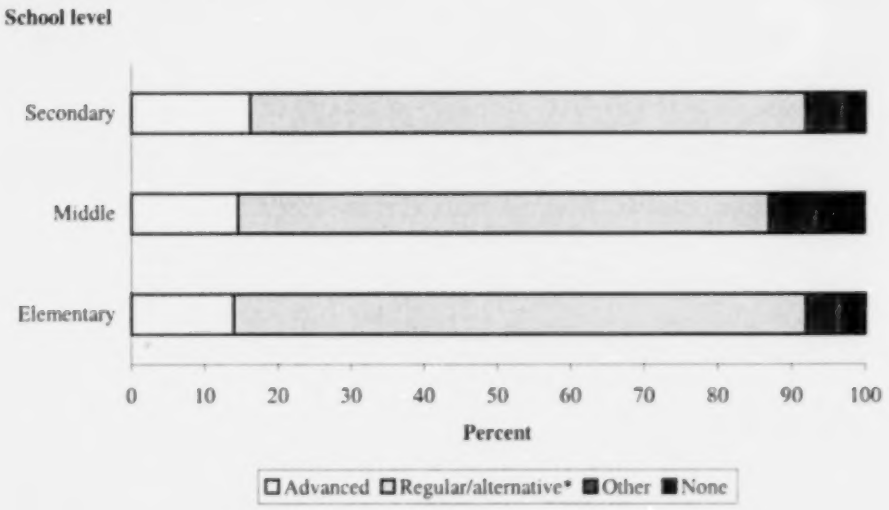
Certification to teach in a particular field is one of several measures of preparation for teaching in the public schools. While certification does not guarantee that a teacher has all the qualities necessary to be effective on the job, it does ensure that teachers have met minimum education requirements and, usually, completed a period of student teaching and passed a formal test on teaching methods and content for their field. Some recent research on teacher certification indicates that mathematics teachers with either standard, probationary, or emergency certification in mathematics had students with higher average scores on standardized 12th-grade mathematics tests, compared with teachers who had no certification in that field (Goldhaber and Brewer 1999). Similar evidence, though somewhat weaker, pertained to the certification status of science

[14]Teachers reported the type of certification they had in their main field and in their other field (if any): advanced; regular or alternative; provisional, probationary, temporary, or emergency; or none. Except for the main field "general elementary," data were not collected on the school level to which certification applied.

teachers (some of the science teacher measures had no statistically significant association with differences in students' science test scores).

One policy concern is that middle school teachers may be less prepared than secondary school teachers to teach subject-specific classes, and data from SASS provide some support for this concern. In 1993–94, as table 13 shows, about three-quarters of all teachers had regular certification[15] in their main assignment field, and another 15 percent had advanced certification. (Main field was defined as the field in which a teacher taught the most classes.) However, middle school teachers were slightly less likely than elementary or secondary teachers to have regular certification in their main field (figure 11). (Furthermore, the proportion of middle school teach-

Figure 11—Percentage distribution of teachers according to type of certification in main assignment field, by school level: 1993–94



*Only about 1 percent of public school teachers had alternative certification in their main assignment field in 1993–94. U.S. Department of Education, National Center for Educational Statistics, *Schools and Staffing in the United States: A Statistical Profile, 1993–94* (NCES 96–124), R.R. Henke, S.P. Choy, S. Geis, and S.P. Broughman (Washington DC: 1996), 58.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

[15]The second column in table 13 includes teachers who had either regular or alternative certification in their main field, but the vast majority of these teachers had regular certification. Only about 1 percent of all teachers in 1993–94 had alternative certification, which generally allows different means for meeting the requirements set for regular certification. The term "regular certification" is used here to improve readability.

ers who had no certification in their main field was about twice that in elementary or secondary schools, though it was still a small proportion (6 percent versus 3 percent for the other two levels).

Teachers may be assigned to teach a field other than their main one; in such cases the former is referred to here as their "other" assignment field. At all school levels, regular and advanced certification in teachers' other assignment field were far less common than in the teachers' main field. Still, at least 50 percent of teachers at each level had regular or advanced certification in their other field. While the percentage with regular certification in their other assignment field increased with school level, more than 40 percent of middle and elementary school teachers lacked certification of any type in their other field.

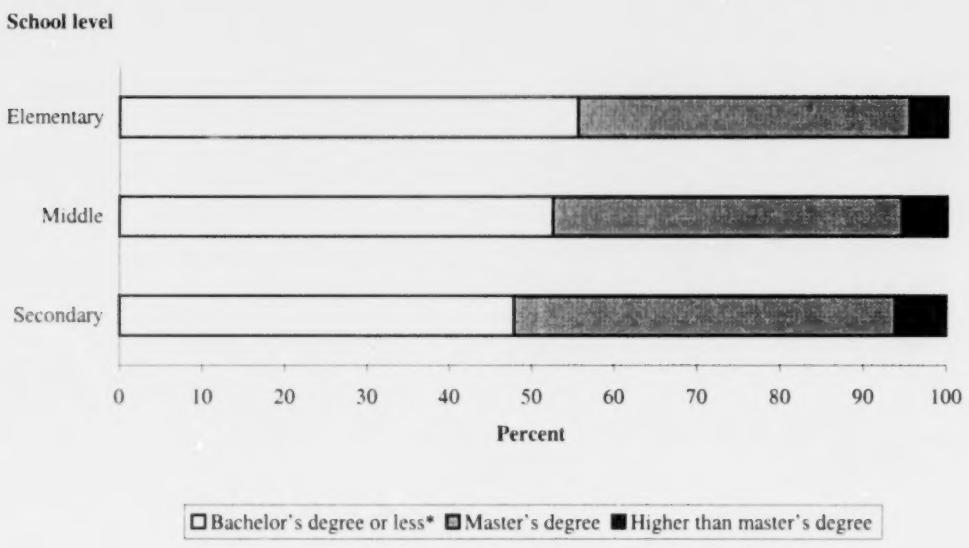
Lack of certification is a particular concern for teachers who teach a core academic subject. Table 14, which is restricted to middle or secondary school departmentalized teachers whose main assignment was a core subject, presents data on their certification status. Approximately 7–8 percent of middle school teachers whose main assignment was in mathematics, science, English, or social studies lacked any certification in that field in 1993–94. By contrast, 2–3 percent of secondary school teachers who taught one of these core fields as their main assignment lacked certification in that field.

Education and Experience of Teachers

Educational attainment provides another indicator of teachers' preparation. Slightly more than one-half of all public school teachers in 1993–94 had attained a bachelor's as their highest degree (table 15), and about 42 percent had earned a master's degree. The likelihood that a teacher had attained a master's or other advanced degree (doctoral, professional, or educational specialist degree) increased slightly with school level (figure 12). A similar pattern was evident in 1987–88 and 1990–91 as well.

Another central component of teacher quality, complementing educational attainment, is teaching experience. A high proportion of experienced colleagues in the school can provide a strong resource for giving advice and guidance to new teachers as well as help students. While new teachers often bring high levels of enthusiasm, energy, and a fresh perspective to the job, gaining teaching experience generally increases skills and effectiveness. In 1993–94, there was a slightly higher percentage of new teachers (those with three or fewer years of teaching experience) at middle schools (14 percent) than at elementary or secondary schools (12 percent and 11 percent, respectively) (table 15). A partial explanation may be that one-year teacher retention rates were slightly lower at middle schools in 1993–94 (see table 22). Another contributing factor

Figure 12—Percentage distribution of teachers according to highest degree earned: 1993–94



*Only 0.7 percent of public school teachers had attained less than a bachelor's degree in 1993–94. U.S. Department of Education, National Center for Educational Statistics, *Schools and Staffing in the United States: A Statistical Profile, 1993–94* (NCES 96–124), R.R. Henke, S.P. Choy, S. Geis, and S.P. Broughman (Washington DC: 1996), 54.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

may be the recent growth in the number of middle schools. Looking at trends over time, the percentage of teachers who were new increased at middle schools as well as at other schools during the six years between 1987–88 and 1993–94.

At the other end of the spectrum, 40 percent of teachers in secondary schools had at least 20 years of experience in 1993–94, compared with about 33 percent of those in middle and elementary schools. This difference in the proportion of highly experienced teachers may be attributable to a number of factors, including the growing number of middle schools, teacher assignment practices in school districts, number of positions and staff available at different levels, and perhaps teacher transfer choices.

Professional Development Activities of Teachers

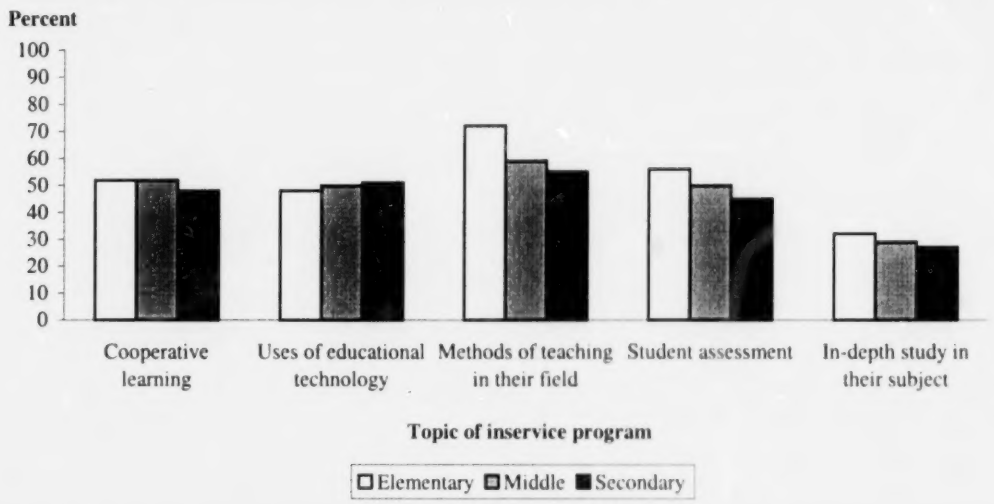
Ongoing training for teachers has long been a recommended strategy for improving teaching techniques, broadening teachers' understanding of intellectual/psychosocial development and other characteristics of their students, and deepening knowledge of their subject matter (for

teachers with subject specializations). One of the National Education Goals is to ensure that all teachers have access to high-quality professional development training, underscoring the importance placed on inservice training activities.

The SASS data indicate that most teachers have some exposure to training each year. In 1993–94, teachers' training participation rates during the previous summer or current school year ranged from 30 percent for in-depth study of their subject's content to 64 percent for teaching methods in their field (table 16). About one-half of teachers received training on each of the other three topics included in the survey: using educational technology for instruction (49 percent), student assessment methods (51 percent), and cooperative learning in the classroom (also 51 percent).

For two of the topics, using educational technology and cooperative learning, there were only minimal differences by school level (figure 13). However, for the three other inservice programs examined, teachers were less likely to participate in training as school level increased. The differences were notable with respect to training for teaching methods in their field, in which 71 percent of elementary, 59 percent of middle, and 54 percent of secondary school teachers par-

Figure 13—Percentage of teachers who had participated in an inservice program on selected topics since the end of the last school year, by school level: 1993–94



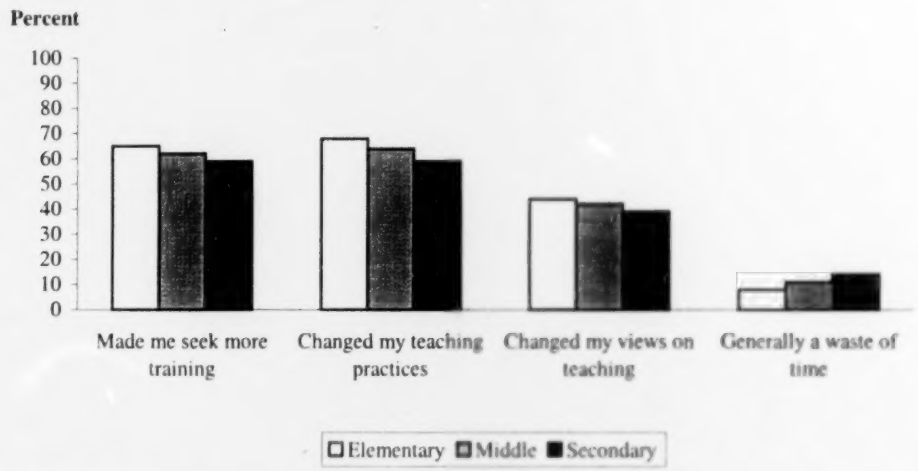
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

ticipated. Moreover, even though teachers above the elementary school level are highly likely to work in departments and have a specialized subject, they were less likely than elementary teachers to participate in in-depth study of that subject.

Teachers were also asked to report the effects of participating in these inservice training programs. The majority of teachers who participated reported that their training provided them with new information, led them to seek additional information/training, and caused them to change their teaching practices (figure 14 and table 17). About 42 percent of teachers reported that the training changed their views on teaching, and relatively few (11 percent) reported that it was generally a waste of time.

Although the differences by school level were generally not large, a consistent pattern appears: the proportion of teachers agreeing with the four positive statements[16] about the training

Figure 14—Of teachers who had participated in recent inservice training on various topics,* the percentage who agreed with various statements about its effects, by school level: 1993–94



*The five topics were the uses of educational technology, teaching methods in their subject, in-depth study of their subject, student assessment, and cooperative learning in the classroom. Teachers who reported that they agreed or strongly agreed with the statements are included in this table. Other response options were "no opinion," "disagree," and "strongly disagree."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

[16]The four statements that could be interpreted as reflecting favorably on the training program were "It provided information that was new to me"; "It caused me to seek more information or training"; "It caused me to change my teaching practices"; and "It changed my views on teaching."

decreased as school level increased. Also, the proportion of teachers who reported that the training was generally a waste of time increased with school level, from 8 percent of teachers at elementary schools to 11 percent at middle schools to 14 percent at secondary schools. Thus, for each of the five topics, elementary school teachers reported gaining the greatest benefit from professional development training, middle school teachers somewhat less, and secondary school teachers reported the least benefit.

Education, Experience, and Training of Principals

Several avenues of preparation are open to a teacher who aspires to be a school principal. Earning a master's or other advanced degree is usually a requirement to obtain a position as a principal, and graduate training may provide aspiring principals with skills in personnel hiring and management, budget planning and analysis, grant proposal writing, or staff leadership and evaluation. Those who aim to be principals may also participate in district- or state-provided courses or workshops in relevant management topics or, once they have completed some training, work in an internship program for school administrators.

In 1993–94, nearly all principals of public schools had attained at least a master's degree. About two-thirds held a master's degree and about one-third had earned a doctorate[17] (table 18). Secondary school principals were slightly more likely than middle or elementary school principals to have a doctorate. There was also a substantial shift from 1987–88 to 1993–94: master's degrees became more common among principals at all school levels, and doctoral degrees less common.

Having some experience on the job is one factor likely to contribute to principals' effectiveness. Middle schools were slightly more likely to have a new principal (those with three or fewer years of experience as a principal) than were either elementary or secondary schools. On the other hand, there was no variation across schools of different levels in the proportion with moderately experienced (those with four to nine years) or highly experienced principals (those with ten or more years' experience).

With the exception of administrative internships, principals' rates of participation in focused training for their job (programs for aspiring principals, inservice training in evaluation and supervision, and management techniques training) did not differ by school level in 1993–94 (table 19). The small minority of principals with none of these four types of preparation for their job (about 8 percent among all schools) also did not differ by school level. Completion of specific

[17]The master's degree category in table 18 includes education specialist degrees, and the doctoral category includes first-professional degrees.

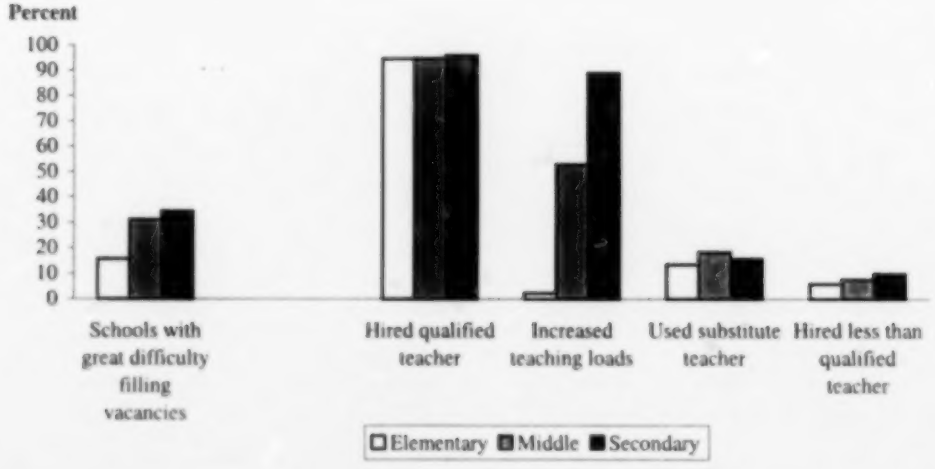
principalship training is generally required by state or district policies (or both), and such policies usually apply to schools at all levels.

Some changes occurred in the training patterns of middle school principals over the six years encompassed by the SASS data. The percentage of middle school principals, as well as those at other levels, who had participated in an administrative internship rose from 33 percent in 1987–88 to 45 percent in 1993–94. Participation by elementary and secondary school principals in professional development for aspiring principals increased from 1990–91 to 1993–94, though there was no such change for middle school principals. (Data from 1987–88 are not available for this item.)

Handling Teaching Vacancies

Some schools have more vacancies to fill than others, and requirements for particular positions may either narrow or widen the potential pool of teacher candidates. In 1993–94, about twice as many middle or secondary schools reported great difficulty filling a teaching vacancy (or could not fill it) as did elementary schools (31 and 34 percent versus 16 percent, respectively) (figure 15 and table 20). Because schools at the two higher levels are mainly departmentalized,

Figure 15—Percentage of public schools that had great difficulty filling teaching vacancies, and, of those that had difficulty, percentage that used selected strategies for filling them, by school level: 1993–94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1993–94.

the pool of applicants for many openings is limited to those who have specialized preparation in a particular subject as well as middle- or secondary-level credentials, whereas elementary school teacher applicants usually need simply a bachelor's degree and certification in general elementary-level teaching.

By far the most common method for filling vacancies was hiring a fully qualified teacher, used by about 95 percent of public schools at the elementary, middle, and secondary levels. However, when no fully qualified teacher could be found, other methods were sometimes implemented, including hiring a less than fully qualified teacher, assigning another teacher or administrator, and expanding class sizes.

Increasing the teaching load (adding a class to a teacher's schedule) was employed by nearly 90 percent of schools at the secondary level, about 50 percent of middle schools, and only rarely by elementary schools (figure 15). These differences in increasing teaching loads reflect class organization: departmentalized classes are the norm in middle schools and even more predominant in secondary schools. Principals may have the option of assigning departmentalized teachers an additional class. Most elementary school teachers, on the other hand, have one class that stays with them all day, so it is not possible to assign them another class. (About 79 percent of teachers in elementary schools had self-contained classes in 1993–94, while 79 percent of those in middle schools and 92 percent of those in secondary schools had departmentalized classes; see table 6.)

By comparison, methods for filling teaching vacancies that were used relatively infrequently regardless of school level include hiring a long-term substitute teacher, hiring a less than fully qualified teacher, and assigning a teacher of another subject/grade level or an administrator.

Teachers' Workload and Support From Other Professional Staff

The ratio of students per full-time-equivalent (FTE) teacher is related to average class size, which is determined partly by district or state policies and partly by differences in student population size, the staff available for particular age ranges, and whether classes are departmentalized.[18] The ratio of students per FTE teacher decreased slightly with school level. At the elementary level, the ratio was 17.9 students to each FTE teacher in 1993–94; at middle schools, the ratio was 16.5; and at secondary schools, it was 15.7 (table 21). This ratio is related to average class size (shown in table 6), which does not differ widely. Average class size ranged from 24.1 students for elementary schools (teachers with self-contained classes only); 24.7 students for

[18]Offering specialty courses and courses in different "tracks" tends to decrease the students per FTE teacher ratio, because it may mean that some classes are not filled to the maximum number of students.

middle schools; and 22.7 students for secondary schools (for the latter two levels, teachers with departmentalized classes only) in 1993–94.

Teachers draw support from other professional staff in the school, some of whom supplement and support their curriculum (such as librarians) and some of whom help students who have particular needs (such as school counselors). Nearly all schools had a librarian or media specialist on staff, although these staff did not necessarily work at one school full time (table 21). School counselors, on the other hand, were equally likely to be on staff at middle and secondary schools (about 94 percent of these schools had them), and less likely to be found in elementary schools (72 percent). The needs of most students for guidance and counseling services increase as they grow older, partly because they tend to take on some responsibility for choosing courses in the higher grades and need advice on planning for college and completing college applications in secondary school.

Teacher Retention, Mobility, and Attrition

Some turnover among teachers is inevitable, but it is generally considered desirable for educational purposes to retain a high percentage of the teachers in a school from year to year. Differences by level on measures like teacher retention and attrition may reflect variation in overall teacher satisfaction and in other job opportunities.

The Teacher Follow-up Survey (TFS) is designed to track teachers' retention, mobility, and attrition rates, to monitor teacher satisfaction, and to identify the reasons teachers have for changing schools or leaving teaching. The TFS was administered during the school year following each SASS administration to a subset of the teachers who filled out a SASS Teacher Questionnaire. Thus, the TFS data were collected in 1988–89, 1991–92, and 1994–95. Because the TFS sample is much smaller than the SASS sample, apparent differences among subgroups need to be larger to be statistically significant.[19]

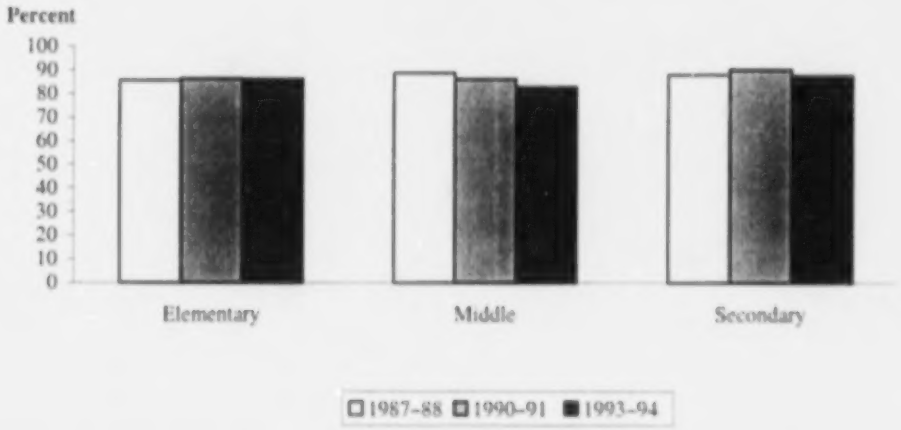
Table 22 presents data on the percentages of teachers who remained at the same school ("stayers"), those who moved to a different school ("movers"), and those who left the teaching profession entirely ("leavers") within one year.[20] Generally, 80–90 percent of teachers surveyed in 1993–94 remained at the same school the following school year, with a slightly lower percent-

[19]In some TFS-based tables, apparent differences show up in a consistent pattern, but except as noted are not statistically significant. It is possible that with a larger sample, many more of these differences would be significant. For more information on the TFS sample and characteristics of respondents, see Whitener, Gruber, Lynch, Tingos, Perona, and Fondelier 1997.

[20]Other TFS-based tables in this report address other topics; however, they are restricted to teachers who remained at the same school one year later because data on the teacher's school level are available for only this group. It should be noted that for those tables, the distribution of teachers is likely to be somewhat biased toward teachers who were satisfied with their jobs.

age doing so at middle schools (figure 16 and table 22). Similarly, middle school teachers were slightly more likely to move to a different school within one year than teachers at the secondary level. However, this pattern was not found in earlier SASS and TFS data.

Figure 16—Percentage of 1987–88, 1990–91, and 1993–94 teachers who were teaching at the same school one year later, by school level



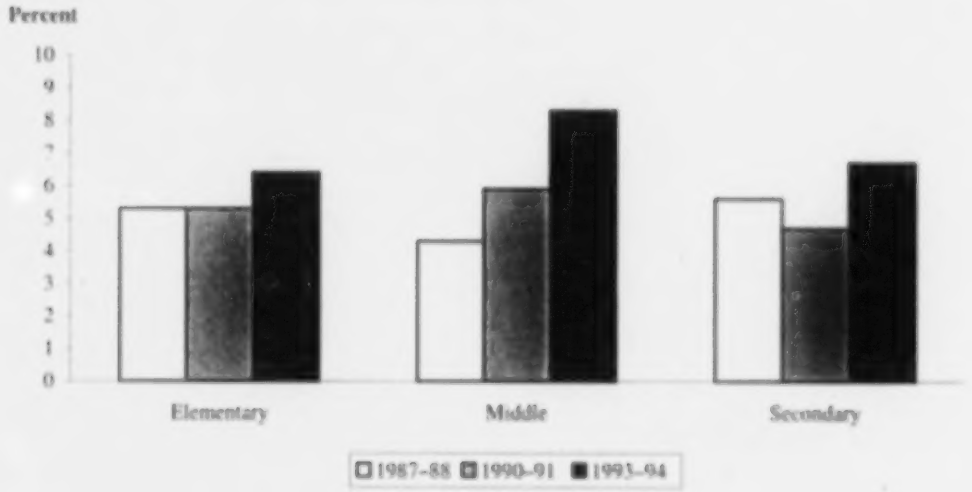
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1988–89, 1991–92, and 1994–95.

Trends over the six years show that 4 percent of 1987–88 middle school teachers left the teaching profession by the next year, and this proportion doubled to about 8 percent for 1993–94 teachers (figure 17). Changes at the other two school levels in the percentage of leavers were not so consistent. Similarly, the proportion of middle school teachers who remained at the same school the following year dropped from 89 percent to 83 percent during the same time period. Parallel decreases did not occur over these six years in the percentage of elementary or secondary school teachers staying at the same school or leaving the profession, so it seems unlikely that broader changes in the education field or in the overall labor market fully explain the changes among middle school teachers.

Instructional Practices

Schools may have made more progress on implementing administrative changes than on changing instructional practices and curriculum (Mergendoller 1993). While changes in scheduling and school organization may help students make connections with school staff and other

Figure 17—Percentage of 1987–88, 1990–91, and 1993–94 teachers who had left the teaching profession by the next school year, by school level



SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1988–89, 1991–92, and 1994–95.

students as they adjust from the more personal elementary school environment, such adjustments alone are not sufficient to bring about the fundamental changes in learning called for by middle school reformers. Indeed, a 1993 study by the National Middle School Association found that teaching methods were fundamentally unchanged: in 90 percent of the grades 6–8 schools surveyed, classroom instruction still relied heavily on teacher presentation, drill, and practice (McEwin, Dickinson, and Jenkins 1996, 61–63). This section begins with a discussion of principals' top goals for their schools, since these goals are designed to influence teachers' priorities as they develop and implement teaching strategies. Following this analysis of highest goals is an examination of teachers' use of various instructional practices.

Principals ranked their top three out of eight goals listed on the 1993–94 survey, covering students' academic, interpersonal, and psychosocial development. The goals selected by the highest proportion of principals focused on academics, not surprisingly: 72 percent of principals chose building basic literacy skills (in language arts and mathematics), and 63 percent placed encouraging academic excellence among their three most important goals (table 23). Other goals that received at least 50 percent of principals' votes for highest priorities were promoting good work habits and self-discipline (58 percent) and promoting personal growth (building self-esteem and similar tasks) (50 percent). Relatively few principals selected promoting specific moral val-

ues and multicultural awareness or understanding as one of their three most important educational goals.

Principals' likelihood of placing literacy skills in the top three goals declined with school level, while their ratings of "academic excellence" increased with school level; however, at all levels, these two goals were rated highly. This variation in emphasis probably reflects the expectations placed on schools: for example, a commonly shared opinion is that elementary schools' main purpose is to teach basic skills and that once students have mastered those skills, schools need to shift emphasis to academic excellence in the higher grades. Principals were also less likely as school level increased to select promoting students' personal growth as a top goal. Principals at different school levels did not differ in their rates of selecting good work habits and self-discipline, human relations skills, and specific moral values as top goals.

Instructional methods are one of the keys to student learning: the activities that teachers undertake when they teach and the tasks that students engage in every day in the classroom are fundamental influences on learning. Yet Johns Hopkins University researcher Douglas Mac Iver[21] pointed out recently that students are regularly directed to fill out worksheets and watch teachers lecture and write on the board. Mac Iver charged that the typical middle grades curriculum is "too often repetitive, unfocused, and unchallenging" (Argetsinger 1999). Many researchers and educators have recommended greater use of activities that engage students thoroughly and actively in their work. In this view, students need to make their own connections between pieces of information and skills, in effect constructing their own learning. Such active engagement in mental work is necessary if students are to gain the analytical reasoning, creative thinking, and evaluative skills required of many workers today. (Furthermore, as job growth rates for "knowledge workers" tend to be higher than for other occupations, a higher proportion of jobs in the future will likely demand a broad range of thinking and organizational skills.)

Tables 24 and 25 present information on various activities students engage in while in the classroom and while doing homework. (Although certain differences by level exist, they are difficult to interpret so they are not discussed here.[22]) At least 80 percent of teachers said that they

[21]Mac Iver chaired the Maryland task force that, among other actions, demanded better teacher training and greater emphasis on academic skills for the state's middle schools in 1999.

[22]Many of the practices appeared to be used more frequently in elementary schools than in others. However, elementary school teachers usually spend much more time in a week with their group of students than teachers at the higher school levels, who are mostly in departments. Teachers in departments selected one of their classes to use as the basis for answering questions about instructional practices; they are likely to spend up to about five hours a week with that class. Teachers with self-contained classes, who mostly work in elementary schools, spend at least 20 hours a week with their classroom of students. Therefore, even though the percentage of elementary school teachers who engaged their students in a particular activity in a typical week may be higher than the percentage of middle or secondary school teachers who did the same, that does not mean elementary school *students* are doing the activity more frequently. (Middle and secondary school students usually have numerous teachers, each of whom may be asking their students to engage in the same activity.)

asked students to engage in the following practices weekly (table 24): respond orally to open-ended questions, lead or participate in whole-group discussions, and use printed material other than textbooks. Between 60 and 70 percent of teachers directed students to use these techniques:

- Evaluating other students' work or conferring with other students;
- Working on problems with several correct answers or methods of solution;
- Explaining links between classroom lessons and the real world; and
- Evaluating and improving their own work.

The only classroom method cited by fewer than half the teachers surveyed was having students work on group projects or presentations. Teachers also reported frequently emphasizing the three high-order skills displayed in table 25. At least three out of four teachers said they emphasized these skills on a weekly basis with their students: analyzing or interpreting information; organizing, summarizing, or displaying information; and generalizing from patterns or examples.

Homework can also provide opportunities for strengthening high-level skills, and it can take advantage of students' growing intellectual capabilities as they mature by incorporating greater complexity. Of the seven types of homework tasks presented in table 26, only two were used weekly by more than 40 percent of teachers: writing short pieces and applying concepts to unfamiliar situations. Between 20 and 30 percent of teachers reported that they assigned writing a journal entry or working on a project, gathering data, or conducting an experiment at least once a week. Assignments given relatively infrequently for homework included preparing written reports, working on projects with no obvious method of solution, and preparing oral reports.

6. School Climate

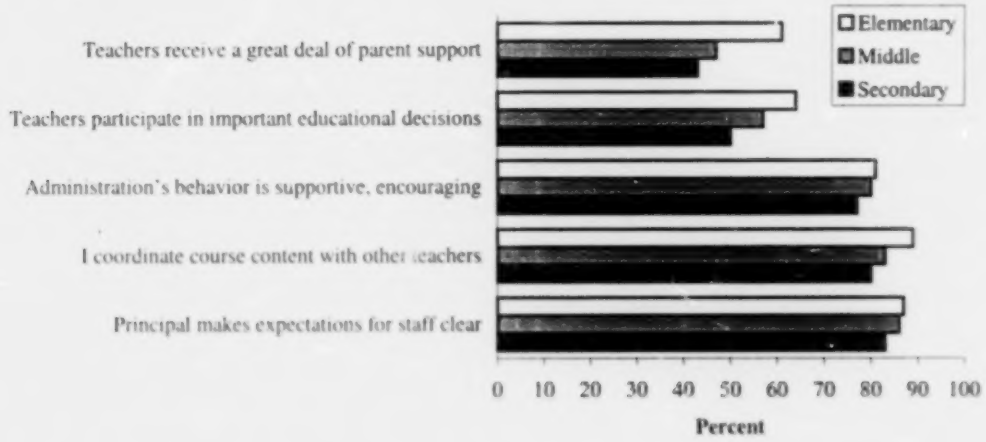
School climate can have a substantial effect on teachers' and other staff members' morale and effectiveness as well as on student learning. Teachers' interactions with each other and with the administrator(s); school practices; teachers' job satisfaction; and problems that teachers and principals perceive in their schools and among their students all affect school climate. In each Schools and Staffing Survey (SASS) administration, teachers and principals were asked their opinions about various facets of their school's management and functioning, and to rate the seriousness of certain problems in their schools. Teachers were also asked about their satisfaction with various aspects of their jobs in the Teacher Follow-up Survey (TFS). This section provides an analysis of these school climate considerations.

Teachers' Evaluations of Their Schools' Climate

The SASS asked teachers to express their degree of agreement with a broad range of statements about school climate, including aspects related to their principals, students, colleagues, and the school's atmosphere. Several statements received widespread agreement; for example, about 80 percent or more of teachers at all levels agreed that the administration is supportive and encouraging, that the principal enforces school rules and backs them up, that they try to coordinate course content with colleagues, that teachers are evaluated fairly, and that the principal makes expectations for staff clear (table 27). A substantial minority of teachers agreed with several negative statements. For example, about one in four teachers (27 percent) reported that it is sometimes a waste of time to try to do their best, 24 percent said that some school rules conflict with their best professional judgment, and 16 percent stated that the principal does a poor job of getting resources.

When differences appeared across school levels in 1993–94, a consistent pattern emerged. The percentage of teachers agreeing with positive statements tended to decrease with school level, while the percentage agreeing with negative statements increased with school level, suggesting an overall decline in satisfaction with school climate from the elementary to middle to secondary levels (figures 18 and 19 and table 27). Specifically, the rates of agreement with the following positive statements decreased as school level increased: that teachers participate in most important educational decisions, that they receive a great deal of parental support, that the administration's behavior is supportive and encouraging, that they try to coordinate course con-

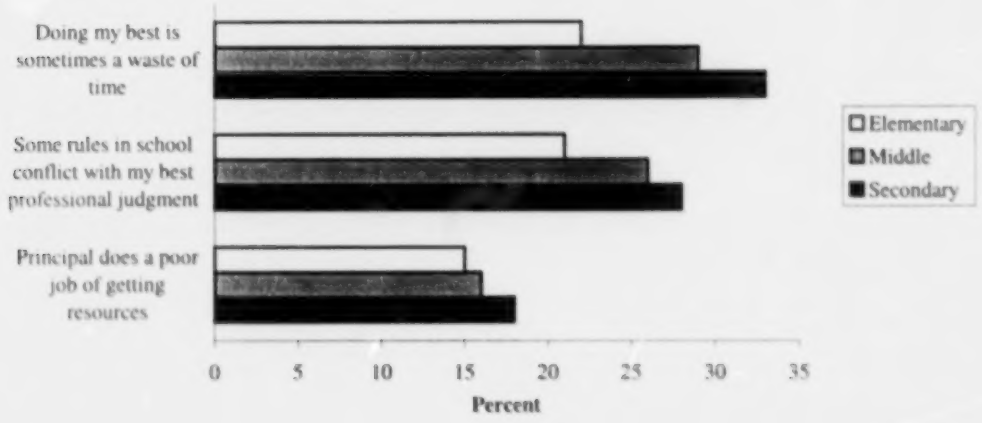
Figure 18—Percentage of teachers who agreed with various positive statements about their schools, by school level: 1993–94


Teachers receive a great deal of parent support
Teachers participate in important educational decisions
Administration's behavior is supportive, encouraging
I coordinate course content with other teachers
Principal makes expectations for staff clear
Elementary
Middle
Secondary
0 10 20 30 40 50 60 70 80 90 100
Percent

NOTE: Teachers were included in this figure if they said they "strongly agreed" or "somewhat agreed" with the statements. The other two response options were "somewhat disagreed" and "strongly disagreed."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Figure 19—Percentage of teachers who agreed with various negative statements about their schools, by school level: 1993–94


Doing my best is sometimes a waste of time
Some rules in school conflict with my best professional judgment
Principal does a poor job of getting resources
Elementary
Middle
Secondary
0 5 10 15 20 25 30 35
Percent

NOTE: Teachers were included in this figure if they said they "strongly agreed" or "somewhat agreed" with the statements. The other two response options were "somewhat disagreed" and "strongly disagreed."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

tent with colleagues, and that the principal makes expectations for staff clear. For most statements, the differences were not large, but the pattern is clear. Complementing this pattern, for three negative statements included in figure 19 and table 27—that teachers sometimes feel it is a waste of time to do their best, that teachers sometimes have to follow rules in their school that conflict with their best professional judgment, and that the principal does a poor job of getting resources—teachers' likelihood of agreeing increased with school level. These findings are consistent with the data analyzed below on teacher satisfaction: teachers tended to be less satisfied with various aspects of their schools and jobs at higher school levels.

At middle schools, moderate decreases occurred from 1987–88 to 1993–94 in the percentage of teachers who agreed with the following statements: that they receive a great deal of parent support, that their principal backs them up in enforcing rules, and that school rules sometimes conflict with their best judgment. A greater percentage of middle school teachers agreed that teachers are fairly evaluated in 1993–94 than had done so in 1987–88, and similarly, fewer of these teachers reported in 1993–94 that it is sometimes a waste of time to do their best as a teacher.

Teacher Satisfaction

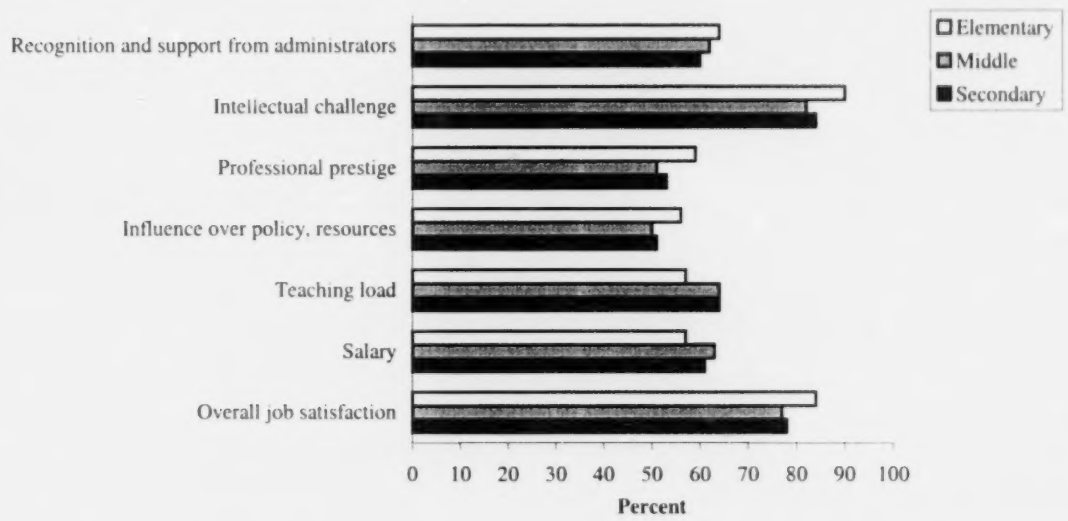
Teachers were asked, in the TFS administered one year after each SASS, to rate their degree of satisfaction with various aspects of their jobs. As with many of the other tables that use TFS data, the teacher satisfaction data presented in table 28 were analyzed and reported only for teachers who remained at the same job one year after the SASS data were collected. This restriction allows identification of the teachers' school level. However, it also means that those who left teaching within one year, those who are likely to have lower job satisfaction levels, and those who taught at another school the next year (who may also be less satisfied) are not included, introducing potential bias to the results. These results should therefore be viewed with caution.

About 86 percent of teachers in the 1993–94 SASS sample were teaching at the same school in 1994–95. High percentages of these teachers were very or somewhat satisfied with the intellectual challenge of their job in 1994–95 (87 percent), with the caliber of their colleagues (85 percent), and with their job overall (81 percent). At least one-half of the teachers reported satisfaction with each aspect of their work shown in table 28.

At all school levels, roughly two-thirds of teachers were satisfied with their opportunity for advancement. Teachers also did not differ by level in their likelihood of being satisfied with their salary and with the school administration's support and recognition. Differences appeared among school levels in teachers' satisfaction with other aspects of their jobs, however (figure 20 and ta-

ble 28). For example, the percentage of teachers who were satisfied with the caliber of their colleagues and with the availability of resources, materials, and equipment decreased as school level increased. In 1994–95, middle and secondary school teachers were less likely to be satisfied with their job's intellectual challenge than were elementary school teachers. Middle school teachers also reported lower satisfaction with their job's professional prestige than did elementary school teachers (51 percent versus 59 percent) in 1994–95. In contrast, elementary school teachers were less satisfied with their teaching load than teachers at other levels. For overall job satisfaction, the percentage of teachers who were satisfied was higher at elementary schools than at the other two levels, but there was no difference between middle and secondary school teachers. At least 77 percent of teachers at each of the school levels reported that they were satisfied with their job overall.

Figure 20—Percentage of teachers who were satisfied with particular aspects of their teaching jobs, by school level: 1994–95



NOTE: Only teachers who taught at the same school as the previous year are included in this table (these "stayers" for 1994–95 constituted 86 percent of all 1993–94 public school teachers). Because teachers who stay at the same school tend to have higher job satisfaction levels than those who leave teaching (and perhaps also higher levels than those who change schools), these data may overstate satisfaction among teachers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1994–95.

Teachers' Ratings of Problems at Their Schools

The SASS asked teachers to rate a number of possible problems at their school as serious, moderate, minor, or not a problem. For many problems in 1993–94, the percentage of teachers reporting that they were serious increased with school level. This was true for student apathy, lack of academic challenge, lack of parent involvement, robbery or theft, and student alcohol use (table 29). For example, while 12 percent of teachers called student apathy a serious problem in elementary schools, 31 percent of teachers in middle schools and 38 percent of teachers in secondary schools did so. At least 30 percent of teachers at the middle and secondary school levels thought that students' arriving unprepared to learn and lack of parent involvement were serious problems.

Two problems stood out as more likely to be serious at middle schools than at the other two school levels: physical conflicts among students and student disrespect for teachers. Although physical conflict was not seen as a widespread problem, about 11 percent of middle school teachers in 1993–94 rated physical conflicts as serious, which could indicate an appreciable amount of disruption in some schools. This figure compares with 7 percent of teachers at the elementary level and 8 percent at the secondary level. Student disrespect for teachers was seen as a serious issue more frequently. Notably, while about one in four middle and secondary school teachers cited student disrespect as a problem, half that proportion of elementary school teachers did the same (12 percent).

The perception of student absenteeism as a problem dropped slightly in secondary and middle schools over the six years covered by the SASS data. A smaller proportion of teachers at both middle and secondary schools rated student alcohol use as a serious problem in 1990–91 than had done so in 1987–88, but there was no change at middle schools over the following three years, and the problem increased at secondary schools by 1993–94. A larger percentage of teachers rated physical conflicts among students as a serious problem in 1993–94 than had done so in 1987–88; this increase occurred at both the middle and secondary levels.

Principals' Ratings of Problems at Their Schools

Principals were also asked to rate problems using the same scale as teachers. School principals generally have less direct contact with students than teachers, which may influence their views of school problems. Like teachers, principals were more likely to rate many issues as serious problems at higher school levels (table 30). Student absenteeism and alcohol use were viewed by principals as much more serious at the secondary level than the lower two levels. As

school level increased, principals were more likely to report that lack of parent involvement and student apathy were problems. (This pattern also appeared with lack of academic challenge, although even at the secondary level, only 4 percent of principals noted it as a serious problem.) In 1993–94, student apathy was rated as a serious problem by 4 percent of elementary school principals, but by about 14 percent of both middle and secondary school principals. Nine percent of principals in elementary schools cited lack of parent involvement as a serious problem, compared with 15 percent of principals at middle schools and 20 percent at secondary schools. Principals' identification of student apathy and uninvolved parents underscores similar reports from teachers, painting a picture of reduced engagement in school over time among both students and parents.

Certain other problems did not fit this pattern; for example, poverty was viewed as a serious problem less commonly as school level increased. Several factors may explain this. First, parents of older children tend to be older themselves and thus, on average, may have higher incomes than parents of younger children. Second, mothers of older children are more likely to work for pay than mothers of younger children, increasing family income. Third, older students may work and contribute to family income. Finally, since parent involvement tends to be greater when children are younger, principals may be more aware of poverty problems among younger students. Reflecting a different pattern, the problem of students' arriving unprepared to learn was cited at a consistent rate by principals at all three school levels (roughly 12 percent). However, slightly more principals at middle schools than at other school levels noted physical conflicts among students as a problem, echoing teachers' ratings. Across all schools, absenteeism was noted by a slightly decreasing proportion of all principals from 1987–88 to 1993–94. In middle schools, those percentages fluctuated, with no clear pattern.

Principals at middle schools were generally less likely than teachers to view problems at their school as serious.[23] With the exception of poverty, this was true in 1993–94 for each issue included in tables 29 and 30. For most of the issues, moreover, teachers were at least twice as likely as principals to rate them as serious problems. This discrepancy may partly be explained by teachers' having more direct contact and interaction with a greater number of students each day than principals do. In addition, principals in many schools handle the most severe disciplinary or other student problems; the rarity of such cases may lead them to think that more moderate cases do not exist, when in fact they do. Rather, moderately difficult problems are likely handled by teachers or other school staff.

[23]These contrasting perceptions were noted in an earlier report: Henke, Choy, Geis, and Broughman 1996, 103.

7. Conclusion

Across the issues examined here with Schools and Staffing Survey (SASS) and Teacher Follow-up Survey (TFS) data, middle schools rarely differed dramatically from elementary or secondary schools. It is possible that with data on other topics, particularly certain qualitative measures, middle schools would stand out more from other schools. Middle schools focus on serving the needs of young adolescents but otherwise share many of the same conditions, constraints, goals, and strengths of other schools. As they open new middle schools and reform existing ones, educators strive to adapt what works well at other levels to a school environment shaped for young adolescents. The overarching similarities across school levels that result should come as no surprise. Where middle and secondary schools share characteristics and differ from elementary schools, the development of middle schools along the secondary school model may provide some explanation. For other patterns, related variables such as school size may be relevant.

- *Middle and secondary schools shared numerous characteristics; perhaps the most prominent of these is their method of organizing classes.*

As in secondary schools, a substantial majority of teachers in middle schools teach in departmentalized settings. Middle and secondary school teachers generally have more specialized training in one or more subjects and tend to have slightly higher educational attainment than those at elementary schools. Middle and secondary schools were about twice as likely as elementary schools to report great difficulty filling teaching vacancies, perhaps partly because the requirements for teaching many of the subjects are more specific. Middle- and secondary-level teachers were less likely to be satisfied than elementary school teachers with their job overall and with its intellectual challenge. On the other hand, teachers at the upper two levels were more satisfied with their teaching load. Teachers viewed student apathy and lack of parent involvement as more prevalent at the upper two school levels.

- *Middle schools sometimes shared characteristics with elementary schools, and both stood apart from secondary schools.*

Among these rare occurrences, middle and elementary school teachers were more likely to team teach their classes than teachers at the secondary level. Teachers in middle and elementary schools were less likely to have 20 or more years of experience than those in secondary schools.

Principals at the lower two school levels viewed student absenteeism and alcohol use as much less widespread problems than principals at secondary schools.

- *For many aspects of schooling, there was an increase or decrease in the prevalence of characteristics by school level, with middle schools falling fairly squarely between the other two levels.*

For example, for inservice programs on teaching methods, in-depth study of their subject, and student assessment methods, teachers were less likely to participate in training as school level increased. Moreover, the proportion of teachers agreeing with the four positive statements about the training decreased as school level increased. The proportion of teachers who thought they had a lot of influence on setting discipline policy decreased notably as school level increased, while their perceived influence over establishing curriculum increased with school level. The percentage of teachers who agreed with many negative statements about their school's climate and management (and who disagreed with several positive statements) or viewed particular problems as serious also increased with school level. Principals, too, were generally more likely to find problems serious as school level increased.

- *Middle schools only rarely stood apart from both elementary and secondary schools, and on those matters, the differences tended to be small.*

For example, middle school teachers were slightly less likely than teachers at other school levels to have regular or alternative certification in their main assignment field. Departmentalized middle school teachers of mathematics, science, English, and social studies were more likely than their secondary school counterparts to lack certification in that field. Middle schools were also slightly more likely than schools at other levels to have a new principal, and higher proportions of middle school teachers were new to teaching, perhaps stemming from the growing number of middle schools. Middle school teachers were slightly less likely than those at other levels to remain at the same school the following year. Teachers were more likely to report that two problems—physical conflicts among students and student disrespect for teachers—were serious at middle schools than at the other two levels.

- *In some areas, particularly those related to provision of services and school management, there were no differences between the various school levels.*

For example, general medical care and diagnostic services were provided by about the same percentage of schools across levels, and more than 90 percent of schools at each level had programs to prevent drug and alcohol use among students. Nearly all schools had a library media specialist on staff. Similarly, principals at each school level were equally likely to think that they had a lot of influence over evaluating teachers' performance and determining the content of in-service training programs. Teachers reported similar rates of satisfaction with their opportunity

for advancement, their salary, and with the school administration's support and recognition at different school levels.

Future Research

The questionnaires for the 1999–2000 SASS (and upcoming 2000–2001 Teacher Follow-up Survey) include most of the items used in the earlier questionnaires. Once these data become available, many of the aspects of schooling discussed here can be examined over a 12-year period. The upcoming surveys also include new items that address additional policy issues that have come to the fore more recently. New or expanded topics in the 1999–2000 survey that may provide information relevant to middle-level education include the uses of schoolwide performance reports; tracking progress on school improvement plans; parent involvement; teacher recruitment, hiring, and dismissal practices; new teacher preparation and support in the school and professional development; ability-based tracking and grouping within classes; charter schools; changes in school schedules; and use of computers and other technology in the school. These new SASS data, which are planned for release in 2001, will provide opportunities for a range of additional comparative analyses among elementary, middle, and secondary schools.

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Appendix A—Detailed Tables

Table 1—Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94					
Total	80,740	48,819	11,712	17,129	3,079	6,888	2,702	2,123	1,263	15,865
School size										
Fewer than 150	9,449	4,696	1,024	2,574	1,154	326	578	121	62	2,513
150–499	37,071	26,694	3,952	5,152	1,273	2,167	754	1,031	202	4,949
500–749	19,744	13,104	3,569	2,731	341	2,057	793	719	358	2,372
750 or more	14,476	4,325	3,167	6,672	311	2,338	577	252	641	6,031
District size										
Fewer than 1,000	13,533	7,170	1,320	4,054	990	596	512	212	65	3,988
1,000–9,999	34,925	20,488	5,768	7,659	1,010	3,184	1,166	1,418	555	7,105
10,000 or more	25,221	16,695	3,653	4,019	854	2,581	728	344	505	3,514
Community type										
Central city	19,184	13,077	2,468	2,975	664	1,668	540	261	338	2,637
Urban fringe/large town	21,912	13,927	3,445	4,043	497	2,115	811	520	487	3,555
Rural/small town	39,644	21,815	5,800	10,111	1,918	3,105	1,352	1,343	438	9,673
Free/reduced-price lunch recipients										
Less than 20 percent	24,765	12,805	3,633	7,822	505	2,081	736	817	448	7,373
20 percent or more	50,305	33,216	7,369	7,580	2,140	4,447	1,724	1,198	761	6,819
Minority enrollment										
Less than 20 percent	44,825	27,023	6,109	10,349	1,343	3,421	1,460	1,228	742	9,607
20 percent or more	35,915	21,795	5,604	6,780	1,735	3,467	1,241	896	522	6,258
Minority teachers										
Less than 20 percent	63,832	37,657	9,326	14,531	2,317	5,284	2,206	1,836	1,060	13,471
20 percent or more	16,908	11,162	2,387	2,598	761	1,603	496	287	203	2,395

Table 1—Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94—Contined					
Principal										
Male	51,781	26,440	8,659	14,474	2,208	4,993	2,059	1,607	1,011	13,463
Female	26,430	20,893	2,714	2,117	707	1,700	572	442	232	1,885
Principal										
Minority	12,150	8,051	1,922	1,865	313	1,231	417	274	169	1,696
White, non-Hispanic	66,061	39,282	9,451	14,726	2,602	5,463	2,215	1,774	1,073	13,653
Region										
Northeast	13,659	8,586	1,946	2,682	446	1,207	327	412	238	2,444
South	23,644	14,304	3,352	5,458	531	1,746	874	731	200	5,258
Midwest	26,453	15,333	4,182	5,580	1,358	2,816	603	763	517	5,063
West	16,984	10,596	2,234	3,410	744	1,118	898	218	309	3,101
					1990–91					
Total	79,885	48,752	9,938	17,067	4,129	5,742	2,532	1,663	1,539	15,528
School size										
Fewer than 150	9,844	5,327	703	2,388	1,426	298	371	34	97	2,291
150–499	37,966	26,998	3,840	5,344	1,784	1,962	994	884	319	5,025
500–749	18,426	12,269	3,040	2,648	469	1,841	681	517	401	2,247
750 or more	13,649	4,158	2,355	6,687	450	1,641	486	228	722	5,965
District size										
Fewer than 1,000	13,510	7,376	920	3,808	1,406	501	302	117	109	3,699
1,000–9,999	36,443	22,140	5,190	7,790	1,323	2,542	1,344	1,304	592	7,198
10,000 or more	24,518	15,965	3,126	4,383	1,043	2,189	732	205	750	3,633

Table 1—Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1990–91—Continued					
Community type										
Central city	18,684	12,488	2,320	3,126	750	1,512	605	203	526	2,600
Urban fringe/large town	20,849	13,458	2,793	3,950	648	1,693	774	327	490	3,460
Rural/small town	40,352	22,807	4,824	9,990	2,731	2,537	1,152	1,135	523	9,468
Free/reduced-price lunch recipients										
Less than 20 percent	27,624	14,606	3,646	8,558	814	2,244	899	503	616	7,941
20 percent or more	49,047	32,582	6,163	7,416	2,884	3,477	1,525	1,161	889	6,527
Minority enrollment										
Less than 20 percent	45,897	27,934	5,092	10,659	2,211	2,825	1,416	851	843	9,816
20 percent or more	33,988	20,818	4,845	6,407	1,918	2,917	1,115	813	695	5,712
Minority teachers										
Less than 20 percent	64,004	38,339	7,919	14,396	3,350	4,609	2,022	1,288	1,187	13,209
20 percent or more	15,880	10,413	2,018	2,671	779	1,132	510	376	351	2,320
Principal										
Male	54,838	28,848	8,049	14,980	2,960	4,547	2,127	1,375	1,324	13,656
Female	23,096	18,600	1,750	1,750	996	1,124	368	258	184	1,566
Principal										
Minority	10,746	7,028	1,572	1,722	424	927	365	280	237	1,485
White, non-Hispanic	67,188	40,420	8,228	15,008	3,533	4,745	2,130	1,353	1,270	13,738
Region										
Northeast	13,805	8,963	1,574	2,668	600	874	405	295	235	2,433
South	23,690	14,355	2,989	5,399	947	1,579	961	448	300	5,099
Midwest	25,993	15,230	3,486	5,618	1,659	2,203	538	745	658	4,960
West	16,397	10,204	1,889	3,381	924	1,086	627	176	346	3,036

Table 1—Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88					
Total	78,546	48,016	9,086	16,842	4,601	4,645	2,531	1,912	2,011	14,831
School size										
Fewer than 150	8,629	5,037	426	1,606	1,560	189	135	103	57	1,549
150–499	38,635	27,553	3,998	5,094	1,989	1,687	1,157	1,155	485	4,609
500–749	18,093	11,709	2,715	3,097	572	1,497	830	388	667	2,430
750 or more	13,189	3,717	1,947	7,045	480	1,272	409	266	802	6,243
District size										
Fewer than 1,000	12,181	6,559	586	3,113	1,923	306	107	173	79	3,034
1,000–9,999	34,810	21,144	4,849	7,629	1,189	2,190	1,362	1,297	803	6,826
10,000 or more	22,620	14,828	2,588	4,260	943	1,578	719	290	933	3,327
Community type										
Central city	19,482	13,069	2,083	3,411	919	1,359	539	186	682	2,728
Urban fringe/large town	21,133	13,362	2,755	4,389	627	1,426	909	420	778	3,611
Rural/small town	37,947	21,586	4,248	9,043	3,070	1,860	1,084	1,305	551	8,492
Free/reduced-price lunch recipients										
Less than 20 percent	30,668	16,320	3,878	9,484	985	1,925	1,282	671	959	8,526
20 percent or more	44,850	30,280	5,039	6,311	3,219	2,603	1,213	1,223	1,031	5,280
Minority enrollment										
Less than 20 percent	46,733	28,152	5,195	10,545	2,843	2,521	1,481	1,193	1,137	9,408
20 percent or more	31,827	19,865	3,892	6,297	1,773	2,123	1,050	719	874	5,423
Minority teachers										
Less than 20 percent	61,020	36,503	7,125	13,692	3,700	3,610	2,056	1,459	1,533	12,159
20 percent or more	17,541	11,513	1,962	3,150	916	1,034	476	452	479	2,672

Table 1—Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88—Continued					
Principal										
Male	58,141	31,918	7,611	15,096	3,516	3,853	2,169	1,589	1,694	13,402
Female	18,822	15,102	1,353	1,440	927	751	348	254	255	1,185
Principal										
Minority	10,174	6,624	1,320	1,762	469	705	372	242	282	1,480
White, non-Hispanic	66,788	40,396	7,645	14,773	3,974	3,899	2,145	1,601	1,667	13,106
Region										
Northeast	13,917	8,959	1,457	2,843	658	742	344	371	349	2,494
South	22,768	13,703	2,677	4,870	1,518	1,202	798	677	440	4,430
Midwest	25,964	15,306	3,217	5,927	1,514	1,898	603	716	794	5,132
West	15,913	10,049	1,736	3,203	925	802	785	148	427	2,775

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 2—Percentage distributions of public schools according to school level and grade configuration, by selected school characteristics: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	All school levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94					
Total	100.0	60.5	14.5	21.2	3.8	58.8	23.1	18.1	7.4	92.6
Community type										
Central city	100.0	68.2	12.9	15.5	3.5	67.6	21.9	10.6	11.4	88.6
Urban fringe/large town	100.0	63.6	15.7	18.4	2.3	61.4	23.5	15.1	12.1	87.9
Rural/small town	100.0	55.0	14.6	25.5	4.8	53.5	23.3	23.2	4.3	95.7
District size										
Fewer than 1,000	100.0	53.0	9.8	30.0	7.3	45.1	38.8	16.1	1.6	98.4
1,000–9,999	100.0	58.7	16.5	21.9	2.9	55.2	20.2	24.6	7.2	92.8
10,000 or more	100.0	66.2	14.5	15.9	3.4	70.6	19.9	9.4	12.6	87.4
Region										
Northeast	100.0	62.9	14.2	19.6	3.3	62.0	16.8	21.2	8.9	91.1
Midwest	100.0	60.5	14.2	23.1	2.2	52.1	26.1	21.8	3.7	96.3
South	100.0	58.0	15.8	21.1	5.1	67.4	14.4	18.2	9.3	90.7
West	100.0	62.4	13.2	20.1	4.4	50.0	40.2	9.8	9.1	90.9
					1990–91					
Total	100.0	61.0	12.4	21.4	5.2	57.8	25.5	16.8	9.0	91.0
Community type										
Central city	100.0	66.8	12.4	16.7	4.0	65.2	26.1	8.7	16.8	83.2
Urban fringe/large town	100.0	64.6	13.4	19.0	3.1	60.6	27.7	11.7	12.4	87.6
Rural/small town	100.0	56.5	12.0	24.8	6.8	52.6	23.9	23.5	5.2	94.8
District size										
Fewer than 1,000	100.0	54.6	6.8	28.2	10.4	54.4	32.8	12.8	2.8	97.2
1,000–9,999	100.0	61.3	14.1	20.6	4.0	51.6	25.5	22.9	7.8	92.2
10,000 or more	100.0	64.1	12.7	19.0	4.2	70.3	23.2	6.5	16.1	83.9
Region										
Northeast	100.0	64.9	11.4	19.3	4.4	55.5	25.7	18.8	8.8	91.2
Midwest	100.0	60.6	12.6	22.8	4.0	52.8	32.2	15.0	5.6	94.4
South	100.0	58.6	13.4	21.6	6.4	63.2	15.4	21.4	11.7	88.3
West	100.0	62.2	11.5	20.6	5.6	57.5	33.2	9.3	10.2	89.8

Table 2—Percentage distributions of public schools according to school level and grade configuration, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	All school levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88					
Total	100.0	61.1	11.6	21.4	5.9	51.1	27.9	21.0	11.9	88.1
Community type										
Central city	100.0	67.1	10.7	17.5	4.7	65.2	25.9	8.9	20.0	80.0
Urban fringe/large town	100.0	63.2	13.0	20.8	3.0	51.8	33.0	15.2	17.7	82.3
Rural/small town	100.0	56.9	11.2	23.8	8.1	43.8	25.5	30.7	6.1	93.9
District size										
Fewer than 1,000	100.0	53.8	4.8	25.6	15.8	52.2	18.2	29.6	2.6	97.4
1,000–9,999	100.0	60.7	13.9	21.9	3.4	45.2	28.1	26.7	10.5	89.5
10,000 or more	100.0	65.6	11.4	18.8	4.2	61.0	27.8	11.2	21.9	78.1
Region										
Northeast	100.0	64.4	10.5	20.4	4.7	50.9	23.6	25.4	12.3	87.7
Midwest	100.0	60.2	11.8	21.4	6.7	44.9	29.8	25.3	9.0	91.0
South	100.0	59.0	12.4	22.8	5.8	59.0	18.8	22.2	13.4	86.6
West	100.0	63.2	10.9	20.1	5.8	46.2	45.2	8.5	13.4	86.6

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 3—Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993-94					
Total	41,621,659	21,322,408	6,805,766	12,515,136	978,351	4,436,035	1,351,900	1,017,831	962,421	11,552,713
School size										
Fewer than 150	792,542	419,703	81,410	218,951	72,479	33,106	44,030	4,274	7,280	211,671
150–499	12,449,493	9,096,346	1,356,840	1,623,665	372,642	763,608	262,540	330,692	67,846	1,555,819
500–749	11,965,029	7,852,383	2,208,088	1,694,104	210,455	1,279,966	487,204	440,918	227,635	1,466,468
750 or more	16,414,595	3,953,976	3,159,428	8,978,416	322,775	2,359,355	558,126	241,947	659,660	8,318,755
District size										
Fewer than 1,000	2,898,322	1,577,693	180,703	879,548	260,377	89,435	40,875	50,393	10,221	869,327
1,000–9,999	17,605,056	8,567,870	3,049,439	6,589,017	398,729	1,740,202	595,742	713,495	396,615	6,192,403
10,000 or more	17,228,132	9,091,724	2,958,364	4,902,441	275,603	2,207,709	551,697	198,958	479,001	4,423,440
Community type										
Central city	12,163,036	6,726,565	1,869,540	3,397,867	169,064	1,337,720	394,070	137,751	302,707	3,095,160
Urban fringe/large town	13,559,662	6,784,975	2,378,824	4,209,408	186,455	1,610,002	501,582	267,240	426,794	3,782,614
Rural/small town	15,898,962	7,810,868	2,557,401	4,907,861	622,832	1,488,313	456,248	612,839	232,922	4,674,939
Free/reduced-price lunch recipients										
Less than 20 percent	15,172,733	6,910,042	2,250,908	6,806,271	205,513	1,430,504	409,993	410,410	370,284	6,435,987
20 percent or more	24,146,352	14,460,994	4,172,119	4,818,392	694,846	2,745,405	850,859	575,855	537,538	4,280,854
Minority enrollment										
Less than 20 percent	20,312,294	10,429,351	3,005,970	6,386,277	490,696	1,888,053	554,303	563,614	542,291	6,843,986
20 percent or more	21,309,366	10,893,057	3,799,796	6,128,859	487,655	2,547,982	797,597	454,217	420,132	6,708,727
Minority teachers										
Less than 20 percent	31,465,576	15,648,037	6,054,314	10,030,494	732,731	3,200,540	1,029,908	823,865	783,726	9,246,769
20 percent or more	10,156,083	6,674,370	1,751,452	2,484,641	245,620	1,235,495	321,992	193,965	178,697	2,305,944

Table 3—Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94—Continued					
Principal										
Male	27,133,364	11,319,801	4,762,857	10,268,462	782,243	3,045,023	964,630	753,204	764,535	9,503,927
Female	13,412,743	9,482,717	1,884,445	1,869,250	176,331	1,290,068	354,257	240,120	186,496	1,682,754
Principal										
Minority	7,290,057	3,917,163	1,407,732	1,867,513	97,648	976,551	276,702	154,480	143,366	1,724,148
White, non-Hispanic	33,256,050	16,885,356	6,239,570	10,270,199	860,926	3,358,541	1,042,185	838,843	807,665	9,462,534
Region										
Northeast	7,344,332	3,740,197	1,154,758	2,285,078	164,299	747,209	187,952	219,597	177,915	2,107,163
South	9,973,026	6,028,037	1,484,110	3,297,977	162,902	831,773	342,734	309,604	157,436	3,140,541
Midwest	15,001,201	7,453,718	2,742,264	4,289,850	515,370	2,011,176	347,169	383,919	327,677	3,962,173
West	9,303,100	6,100,456	1,424,634	2,642,230	135,780	845,877	474,045	104,711	299,394	2,342,836
					1990–91					
Total	40,103,700	20,759,139	5,547,319	12,356,763	1,440,478	3,520,013	1,221,070	806,236	1,173,864	11,182,899
School size										
Fewer than 150	829,806	470,164	60,702	198,707	100,232	28,361	29,406	2,935	8,019	190,688
150–499	12,657,496	9,108,941	1,320,717	1,674,000	553,838	686,628	344,642	289,447	116,209	1,557,791
500–749	11,135,922	7,361,427	1,860,938	1,628,057	285,500	1,137,002	411,517	312,419	251,273	1,376,784
750 or more	15,480,476	3,818,607	2,304,962	8,855,999	500,908	1,668,022	435,505	201,435	798,363	8,057,636
District size										
Fewer than 1,000	2,966,268	1,671,011	134,567	761,903	398,788	75,204	30,547	28,816	13,677	748,226
1,000–9,999	17,751,762	8,963,987	2,581,910	5,635,870	569,995	1,366,362	592,752	622,796	380,990	5,254,880
10,000 or more	16,621,022	8,746,663	2,435,739	5,057,720	380,900	1,792,245	505,774	137,720	714,952	4,342,768

Table 3—Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1990–91—Continued					
Community type										
Central city	11,892,503	6,463,577	1,644,084	3,543,959	240,884	1,136,244	392,140	115,700	465,873	3,078,086
Urban fringe/large town	12,515,609	6,477,596	1,834,831	3,987,701	215,480	1,197,259	419,310	218,263	419,668	3,568,034
Rural/small town	15,695,586	7,817,966	2,068,404	4,825,103	984,114	1,186,510	409,620	472,274	288,324	4,536,779
Free/reduced-price lunch recipients										
Less than 20 percent	16,064,266	6,391,154	2,172,663	7,147,670	352,778	1,447,661	472,207	252,795	515,998	6,631,672
20 percent or more	23,129,846	14,122,121	3,356,888	4,631,966	1,018,870	2,065,365	738,082	553,441	642,472	3,989,495
Minority enrollment										
Less than 20 percent	20,070,442	10,394,017	2,461,336	6,354,507	860,582	1,515,832	539,243	406,261	581,151	5,773,355
20 percent or more	20,033,256	10,365,122	3,085,984	6,002,256	579,895	2,004,181	681,827	399,976	592,713	5,409,543
Minority teachers										
Less than 20 percent	30,263,584	15,210,905	4,264,049	9,631,284	1,157,346	2,716,042	950,393	597,614	829,822	8,801,462
20 percent or more	9,840,115	5,548,234	1,283,271	2,725,479	283,132	803,971	270,677	208,623	344,042	2,381,436
Principal										
Male	28,314,834	12,160,673	4,348,220	10,641,151	1,164,790	2,651,488	1,023,960	672,771	963,617	9,677,535
Female	11,060,527	8,284,555	1,126,132	1,419,702	230,138	823,099	185,725	117,308	168,695	1,251,006
Principal										
Minority	6,313,833	3,561,511	1,022,173	1,568,828	161,321	650,984	223,724	147,465	194,577	1,374,251
White, non-Hispanic	33,061,528	16,883,716	4,452,178	10,492,025	1,233,607	2,823,603	985,961	642,614	937,735	9,554,290
Region										
Northeast	7,088,770	3,742,099	842,346	2,206,797	297,528	506,060	184,041	152,246	174,341	2,032,456
South	9,628,828	4,975,348	1,310,553	3,070,325	272,602	727,534	370,597	212,422	197,465	2,872,860
Midwest	14,374,189	7,228,347	2,278,112	4,220,511	647,218	1,589,806	304,895	383,411	429,310	3,791,202
West	9,011,913	4,813,345	1,116,308	2,859,130	223,130	696,612	361,538	58,157	372,749	2,486,381

Table 3—Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88					
Total	40,058,748	20,237,351	4,960,899	13,199,393	1,661,106	2,800,336	1,288,817	871,745	1,399,017	11,800,375
School size										
Fewer than 150	757,274	447,746	42,292	144,878	122,359	18,120	12,776	11,395	4,451	140,427
150–499	12,890,762	9,285,328	1,383,768	1,632,789	588,877	600,721	397,785	385,262	174,059	1,458,730
500–749	10,924,722	7,016,263	1,643,569	1,919,313	345,577	906,726	503,994	232,850	417,440	1,501,873
750 or more	15,485,990	3,488,014	1,891,270	9,502,413	604,293	1,274,769	374,262	242,238	803,067	8,699,345
District size										
Fewer than 1,000	2,838,104	1,445,588	93,373	798,354	500,789	44,972	10,251	38,150	13,601	784,753
1,000–9,999	17,121,258	8,519,456	2,290,890	5,700,053	610,860	1,089,638	622,963	578,289	490,370	5,209,682
10,000 or more	15,422,368	7,943,260	1,958,182	5,128,711	392,215	1,291,281	483,300	183,601	740,271	4,388,439
Community type										
Central city	12,306,412	6,666,055	1,456,850	3,808,587	374,920	981,903	352,727	122,220	496,243	3,312,345
Urban fringe/large town	12,736,665	6,172,542	1,733,386	4,628,950	201,787	984,158	509,745	239,483	601,943	4,027,007
Rural/small town	15,015,671	7,398,753	1,770,663	4,761,856	1,084,399	834,276	426,345	510,042	300,831	4,461,024
Free/reduced-price lunch recipients										
Less than 20 percent	18,240,468	7,142,556	2,149,697	8,445,111	503,105	1,179,199	646,171	324,327	658,063	7,787,048
20 percent or more	20,754,888	12,821,412	2,753,700	4,093,115	1,086,661	1,580,895	629,859	542,947	721,152	3,371,963
Minority enrollment										
Less than 20 percent	21,467,592	10,490,496	2,550,207	7,373,861	1,053,029	1,348,675	677,966	523,566	727,673	6,646,188
20 percent or more	18,591,156	9,746,854	2,410,693	5,825,532	608,077	1,451,662	610,851	348,180	671,344	5,154,189
Minority teachers										
Less than 20 percent	29,501,700	14,338,775	3,698,392	10,214,712	1,249,822	2,062,166	1,000,899	635,327	1,030,395	9,184,317
20 percent or more	10,557,048	5,898,576	1,262,508	2,984,681	411,284	738,171	287,919	236,418	368,622	2,616,059

Table 3—Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88—Continued					
Principal										
Male	30,429,228	13,362,324	4,042,692	11,649,880	1,374,330	2,261,947	1,077,922	702,823	1,172,676	10,477,205
Female	8,982,541	6,580,990	837,909	1,332,305	231,338	518,626	202,811	116,472	198,031	1,134,274
Principal										
Minority	6,099,936	3,349,543	880,945	1,675,118	194,331	522,921	227,406	130,618	197,499	1,477,618
White, non-Hispanic	33,311,832	16,593,772	3,999,656	11,307,068	1,411,337	2,257,652	1,053,327	688,677	1,173,208	10,133,860
Region										
Northeast	7,396,771	3,670,686	806,843	2,555,325	363,917	420,600	181,245	204,997	248,084	2,307,242
Midwest	9,835,335	4,903,936	1,187,127	3,233,093	511,179	578,978	361,897	246,252	241,251	2,991,842
South	14,434,541	7,136,523	1,970,991	4,707,682	619,346	1,280,694	350,851	339,446	541,001	4,166,681
West	8,392,101	4,526,205	995,939	2,703,293	166,664	520,065	394,825	81,049	368,681	2,334,612

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 4—Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
School size										
Fewer than 150	11.7	9.6	8.8	15.0	37.5	4.7	21.4	5.7	4.9	15.8
150–499	45.9	54.7	33.7	30.1	41.3	31.5	27.9	48.6	16.0	31.2
500–749	24.4	26.8	30.5	15.9	11.1	29.9	29.4	33.8	28.4	15.0
750 or more	17.9	8.9	27.0	39.0	10.1	34.0	21.4	11.9	50.7	38.0
District size										
Fewer than 1,000	18.4	16.2	12.3	25.8	34.7	9.4	21.3	10.8	5.8	27.3
1,000–9,999	47.4	46.2	53.7	48.7	35.4	50.1	48.5	71.8	49.3	48.6
10,000 or more	34.2	37.6	34.0	25.6	29.9	40.6	30.3	17.4	44.9	24.1
Community type										
Central city	23.8	26.8	21.1	17.4	21.6	24.2	20.0	12.3	26.7	16.6
Urban fringe/large town	27.1	28.5	29.4	23.6	16.1	30.7	30.0	24.5	38.6	22.4
Rural/small town	49.1	44.7	49.5	59.0	62.3	45.1	50.0	63.3	34.7	61.0
Free/reduced-price lunch recipients										
Less than 20 percent	33.0	27.8	33.0	50.8	19.1	31.9	29.9	40.6	37.1	52.0
20 percent or more	67.0	72.2	67.0	49.2	80.9	68.1	70.1	59.4	62.9	48.0
Minority enrollment										
Less than 20 percent	55.5	55.4	52.2	60.4	43.6	49.7	54.0	57.8	58.7	60.6
20 percent or more	44.5	44.6	47.8	39.6	56.4	50.3	46.0	42.2	41.3	39.4
Minority teachers										
Less than 20 percent	79.1	77.1	79.6	84.8	75.3	76.7	81.6	86.5	83.9	84.9
20 percent or more	20.9	22.9	20.4	15.2	24.7	23.3	18.4	13.5	16.1	15.1

Table 4—Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Total, all levels	School level				Grade configurations of middle schools			Grade configurations of secondary schools	
		Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94—Continued					
Principal										
Male	66.2	55.9	76.1	87.2	75.8	74.6	78.3	78.4	81.4	87.7
Female	33.8	44.1	23.9	12.8	24.2	25.4	21.7	21.6	18.6	12.3
Principal										
Minority	15.5	17.0	16.9	11.2	10.8	18.4	15.8	13.4	13.6	11.0
White, non-Hispanic	84.5	83.0	83.1	88.8	89.2	81.6	84.2	86.6	86.4	89.0
Region										
Northeast	16.9	17.6	16.6	15.6	14.5	17.5	12.1	19.4	18.8	15.4
Midwest	29.3	29.3	28.6	31.9	17.2	25.4	32.4	34.4	15.8	33.1
South	32.8	31.4	35.7	32.6	44.1	40.9	22.3	35.9	40.9	31.9
West	21.0	21.7	19.1	19.9	24.2	16.2	33.2	10.3	24.4	19.6
					1990–91					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
School size										
Fewer than 150	12.3	10.9	7.1	14.0	34.5	5.2	14.6	2.1	6.3	14.8
150–499	47.5	55.4	38.6	31.3	43.2	34.2	39.3	53.1	20.7	32.4
500–749	23.1	25.2	30.6	15.5	11.4	32.1	26.9	31.1	26.0	14.5
750 or more	17.1	8.5	23.7	39.2	10.9	28.6	19.2	13.7	46.9	38.4
District size										
Fewer than 1,000	18.1	16.2	10.0	23.8	37.3	9.6	12.7	7.2	7.5	25.4
1,000–9,999	48.9	48.7	56.2	48.7	35.1	48.6	56.5	80.2	40.8	49.5
10,000 or more	32.9	35.1	33.8	27.4	27.7	41.8	30.8	12.6	51.7	25.0

Table 4—Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
1990–91—Continued										
Community type										
Central city	23.4	25.6	23.4	18.3	18.2	26.3	23.9	12.2	34.2	16.8
Urban fringe/large town	26.1	27.6	28.1	23.2	15.7	29.5	30.6	19.6	31.8	22.3
Rural/small town	50.5	46.8	48.6	58.5	66.1	44.2	45.5	68.2	34.0	61.0
Free/reduced-price lunch recipients										
Less than 20 percent	36.0	31.0	37.2	53.6	22.0	39.2	37.1	30.2	40.9	54.9
20 percent or more	64.0	69.0	62.8	46.4	78.0	60.8	62.9	69.8	59.1	45.1
Minority enrollment										
Less than 20 percent	57.4	57.3	51.2	62.5	53.6	49.2	55.9	51.2	54.8	63.2
20 percent or more	42.6	42.7	48.8	37.5	46.4	50.8	44.1	48.8	45.2	36.8
Minority teachers										
Less than 20 percent	80.1	78.6	79.7	84.4	81.1	80.3	79.9	77.4	77.2	85.1
20 percent or more	19.9	21.4	20.3	15.6	18.9	19.7	20.1	22.6	22.8	14.9
Principal										
Male	70.4	60.8	82.1	89.5	74.8	80.2	85.2	84.2	87.8	89.7
Female	29.6	39.2	17.9	10.5	25.2	19.8	14.8	15.8	12.2	10.3
Principal										
Minority	13.8	14.8	16.0	10.3	10.7	16.3	14.6	17.1	15.7	9.8
White, non-Hispanic	86.2	85.2	84.0	89.7	89.3	83.7	85.4	82.9	84.3	90.2
Region										
Northeast	17.3	18.4	15.8	15.6	14.5	15.2	16.0	17.7	15.2	15.7
Midwest	29.7	29.4	30.1	31.6	22.9	27.5	38.0	26.9	19.5	32.8
South	32.5	31.2	35.1	32.9	40.2	38.4	21.2	44.8	42.8	31.9
West	20.5	20.9	19.0	19.8	22.4	18.9	24.8	10.6	22.5	19.6

Table 4—Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
School size										
Fewer than 150	11.0	10.5	4.7	9.5	33.8	4.1	5.3	5.4	2.8	10.4
150–499	49.2	57.4	44.0	30.2	43.1	36.3	45.7	60.4	24.1	31.1
500–749	23.0	24.4	29.9	18.4	12.4	32.2	32.8	20.3	33.2	16.4
750 or more	16.8	7.7	21.4	41.8	10.4	27.4	16.2	13.9	39.9	42.1
District size										
Fewer than 1,000	17.5	15.4	7.3	20.8	47.4	7.5	4.9	9.8	4.4	23.0
1,000–9,999	50.0	49.7	60.4	50.8	29.3	53.8	62.2	73.6	44.2	51.8
10,000 or more	32.5	34.9	32.3	28.4	23.3	38.7	32.9	16.5	51.4	25.2
Community type										
Central city	24.8	27.2	22.9	20.2	19.9	29.3	21.3	9.7	33.9	18.4
Urban fringe/large town	26.9	27.8	30.3	26.1	13.6	30.7	35.9	22.0	38.7	24.4
Rural/small town	48.3	45.0	46.8	53.7	66.5	40.0	42.8	68.3	27.4	57.3
Free/reduced-price lunch recipients										
Less than 20 percent	40.6	35.0	43.5	60.0	23.4	42.5	51.4	35.4	48.2	61.8
20 percent or more	59.4	65.0	56.5	40.0	76.6	57.5	48.6	64.6	51.8	38.2
Minority enrollment										
Less than 20 percent	59.5	58.6	57.2	62.6	61.6	54.3	58.5	62.4	56.5	63.4
20 percent or more	40.5	41.4	42.8	37.4	38.4	45.7	41.5	37.6	43.5	36.6
Minority teachers										
Less than 20 percent	77.7	76.0	78.4	81.3	80.2	77.7	81.2	76.3	76.2	82.0
20 percent or more	22.3	24.0	21.6	18.7	19.8	22.3	18.8	23.7	23.8	18.0

Table 4—Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
1987–88—Continued										
Principal										
Male	75.5	67.9	84.9	91.3	79.1	83.7	86.2	86.2	86.9	91.9
Female	24.5	32.1	15.1	8.7	20.9	16.3	13.8	13.8	13.1	8.1
Principal										
Minority	13.2	14.1	14.7	10.7	10.6	15.3	14.8	13.2	14.5	10.2
White, non-Hispanic	86.8	85.9	85.3	89.3	89.4	84.7	85.2	86.8	85.5	89.8
Region										
Northeast	17.7	18.7	16.0	16.9	14.2	16.0	13.6	19.4	17.4	16.8
Midwest	29.0	28.5	29.5	28.9	32.9	25.9	31.5	35.4	21.9	29.9
South	33.0	31.9	35.4	35.2	32.8	40.9	23.8	37.4	39.5	34.6
West	20.2	20.9	19.1	19.0	20.0	17.3	31.0	7.7	21.2	18.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 5—Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
School size										
Fewer than 150	1.9	2.0	1.2	1.8	7.4	0.8	3.3	0.4	0.8	1.8
150–499	29.9	42.7	19.9	13.0	38.1	17.2	19.4	32.5	7.0	13.5
500–749	28.8	36.8	32.4	13.5	21.5	28.8	36.0	43.3	23.6	12.7
750 or more	39.4	18.5	46.4	71.7	33.0	53.2	41.3	23.8	68.5	72.0
District size										
Fewer than 1,000	7.7	8.2	2.9	7.7	27.9	2.2	3.4	5.2	1.2	8.3
1,000–9,999	46.7	44.5	49.3	49.2	42.7	43.1	50.1	74.1	44.8	49.5
10,000 or more	45.7	47.3	47.8	43.1	29.5	54.7	46.4	20.7	54.1	42.2
Community type										
Central city	29.2	31.6	27.5	27.2	17.3	30.2	29.2	13.5	31.4	26.8
Urban fringe/large town	32.6	31.8	35.0	33.6	19.1	36.3	37.1	26.3	44.4	32.7
Rural/small town	38.2	36.6	37.6	39.2	63.7	33.6	33.8	60.2	24.2	40.5
Free/reduced-price lunch recipients										
Less than 20 percent	38.6	29.0	35.0	58.6	22.8	34.3	32.5	41.6	40.8	60.0
20 percent or more	61.4	71.0	65.0	41.4	77.2	65.7	67.5	58.4	59.2	40.0
Minority enrollment										
Less than 20 percent	48.8	48.9	44.2	51.0	50.2	42.6	41.0	55.4	56.4	50.6
20 percent or more	51.2	51.1	55.8	49.0	49.8	57.4	59.0	44.6	43.6	49.4
Minority teachers										
Less than 20 percent	75.6	73.4	74.3	80.2	74.9	72.2	76.2	80.9	81.4	80.0
20 percent or more	24.4	26.6	25.7	19.8	25.1	27.8	23.8	19.1	18.6	20.0

Table 5—Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94—Continued					
Principal										
Male	66.9	54.4	71.6	84.6	81.6	70.2	73.1	75.8	80.4	85.0
Female	33.1	45.6	28.4	15.4	18.4	29.8	26.9	24.2	19.6	15.0
Principal										
Minority	18.0	18.8	21.2	15.4	10.2	22.5	21.0	15.6	15.1	15.4
White, non-Hispanic	82.0	81.2	78.8	84.6	89.8	77.5	79.0	84.4	84.9	84.6
Region										
Northeast	17.6	17.5	17.0	18.3	16.8	16.8	13.9	21.6	18.5	18.2
Midwest	24.0	23.6	21.8	26.4	16.6	18.8	25.4	30.4	16.4	27.2
South	36.0	35.0	40.3	34.3	52.7	45.3	25.7	37.7	34.0	34.3
West	22.4	23.9	20.9	21.1	13.9	19.1	35.1	10.3	31.1	20.3
					1990–91					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
School size										
Fewer than 150	2.1	2.3	1.1	1.6	7.0	0.8	2.4	0.4	0.7	1.7
150–499	31.6	43.9	23.8	13.6	38.4	19.5	28.2	35.9	9.9	13.9
500–749	27.8	35.5	33.6	13.2	19.8	32.3	33.7	38.8	21.4	12.3
750 or more	38.6	18.4	41.6	71.7	34.8	47.4	35.7	25.0	68.0	72.0
District size										
Fewer than 1,000	7.9	8.6	2.6	6.6	29.6	2.3	2.7	3.6	1.2	7.2
1,000–9,999	47.5	46.2	50.1	49.2	42.2	42.2	52.5	78.9	34.3	50.8
10,000 or more	44.5	45.1	47.3	44.1	28.2	55.4	44.8	17.4	64.4	42.0

Table 5—Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1990–91—Continued					
Community type										
Central city	29.6	31.1	29.6	28.7	16.7	32.3	32.1	14.4	39.7	27.5
Urban fringe/large town	31.2	31.2	33.1	32.3	15.0	34.0	34.3	27.1	35.8	31.9
Rural/small town	39.1	37.7	37.3	39.0	68.3	33.7	33.6	58.6	24.6	40.6
Free/reduced-price lunch recipients										
Less than 20 percent	41.0	31.2	39.3	60.7	25.7	41.2	39.0	31.4	44.5	62.4
20 percent or more	59.0	68.8	60.7	39.3	74.3	58.8	61.0	68.6	55.5	37.6
Minority enrollment										
Less than 20 percent	50.0	50.1	44.4	51.4	59.7	43.1	44.2	50.4	49.5	51.6
20 percent or more	50.0	49.9	55.6	48.6	40.3	56.9	55.8	49.6	50.5	48.4
Minority teachers										
Less than 20 percent	75.5	73.3	76.9	77.9	80.3	77.2	77.8	74.1	70.7	78.7
20 percent or more	24.5	26.7	23.1	22.1	19.7	22.8	22.2	25.9	29.3	21.3
Principal										
Male	71.9	59.5	79.4	88.2	83.5	76.3	84.6	85.2	85.1	88.6
Female	28.1	40.5	20.6	11.8	16.5	23.7	15.4	14.8	14.9	11.4
Principal										
Minority	16.0	17.4	18.7	13.0	11.6	18.7	18.5	18.7	17.2	12.6
White, non-Hispanic	84.0	82.6	81.3	87.0	88.4	81.3	81.5	81.3	82.8	87.4
Region										
Northeast	17.7	18.0	15.2	17.9	20.6	14.4	15.1	18.9	14.8	18.2
Midwest	24.0	24.0	23.6	24.8	18.9	20.7	30.4	26.4	16.8	25.7
South	35.8	34.8	41.1	34.2	44.9	45.2	25.0	47.6	36.6	33.9
West	22.5	23.2	20.1	23.1	15.5	19.8	29.6	7.2	31.8	22.2

Table 5—Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
School size										
Fewer than 150	1.9	2.2	0.8	1.1	7.4	0.6	1.0	1.3	0.3	1.2
150–499	32.2	45.9	27.9	12.4	35.4	21.4	30.9	44.2	12.4	12.4
500–749	27.3	34.7	33.1	14.5	20.8	32.4	39.1	26.7	29.8	12.7
750 or more	38.7	17.2	38.1	72.0	36.4	45.5	29.0	27.8	57.4	73.7
District size										
Fewer than 1,000	8.0	8.1	2.2	6.9	33.3	1.8	0.9	4.8	1.1	7.6
1,000–9,999	48.4	47.6	52.8	49.0	40.6	44.9	55.8	72.3	39.4	50.2
10,000 or more	43.6	44.4	45.1	44.1	26.1	53.2	43.3	23.0	59.5	42.3
Community type										
Central city	30.7	32.9	29.4	28.8	22.6	35.1	27.4	14.0	35.5	28.1
Urban fringe/large town	31.8	30.5	34.9	35.1	12.2	35.1	39.6	27.5	43.0	34.1
Rural/small town	37.5	36.6	35.7	36.1	65.3	29.8	33.1	58.5	21.5	37.8
Free/reduced-price lunch recipients										
Less than 20 percent	46.8	35.8	43.8	67.4	31.6	42.7	50.6	37.4	47.7	69.8
20 percent or more	53.2	64.2	56.2	32.6	68.4	57.3	49.4	62.6	52.3	30.2
Minority enrollment										
Less than 20 percent	53.6	51.8	51.4	55.9	63.4	48.2	52.6	60.1	52.0	56.3
20 percent or more	46.4	48.2	48.6	44.1	36.6	51.8	47.4	39.9	48.0	43.7
Minority teachers										
Less than 20 percent	73.6	70.8	74.6	77.4	75.2	73.6	77.7	72.9	73.6	77.8
20 percent or more	26.4	29.2	25.4	22.6	24.8	26.4	22.3	27.1	26.4	22.2

Table 5—Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88—Continued					
Principal										
Male	77.2	67.0	82.8	89.7	85.6	81.4	84.2	85.8	85.6	90.2
Female	22.8	33.0	17.2	10.3	14.4	18.6	15.8	14.2	14.4	9.8
Principal										
Minority	15.5	16.8	18.0	12.9	12.1	18.8	17.8	15.9	14.4	12.7
White, non-Hispanic	84.5	83.2	82.0	87.1	87.9	81.2	82.2	84.1	85.6	87.3
Region										
Northeast	18.5	18.1	16.3	19.4	21.9	15.0	14.1	23.5	17.7	19.6
South	24.6	24.2	23.9	24.5	30.8	20.7	28.1	28.2	17.2	25.4
Midwest	36.0	35.3	39.7	35.7	37.3	45.7	27.2	38.9	38.7	35.3
West	21.0	22.4	20.1	20.5	10.0	18.6	30.6	9.3	26.4	19.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 6—Percentage distribution of public school teachers according to type of class organization, and average class size for teachers in departments and self-contained classrooms, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Percentage of teachers in			Average class size[1] in	
	Departments	Self-contained classrooms	Team-taught classes	Departments	Self-contained classrooms
			1993–94		
Total	51.3	40.5	8.2	23.2	24.1
School level					
Elementary	9.9	79.0	11.1	(2)	24.1
Middle	78.9	8.6	12.4	24.7	(2)
Secondary	91.6	6.1	2.2	22.7	(2)
Combined/ungraded only	56.7	36.3	7.0	19.8	24.7
Middle school grade configuration					
Grades 6–8	78.6	7.7	13.8	25.0	(2)
Grades 7–8	86.2	6.7	7.1	24.4	(2)
Other middle	69.2	16.4	14.4	23.6	(2)
Secondary school grade configuration					
Grades 7–9	89.3	5.5	5.2	24.7	(2)
Other secondary	91.8	6.2	2.0	22.5	(2)
			1990–91		
Total	51.9	41.4	6.6	22.4	24.1
School level					
Elementary	12.6	78.9	8.6	(2)	24.1
Middle	79.7	9.2	11.1	24.2	(2)
Secondary	90.9	7.0	2.0	22.0	(2)
Combined/ungraded only	56.4	36.9	6.7	19.0	22.6
Middle school grade configuration					
Grades 6–8	78.4	9.0	12.5	24.6	(2)
Grades 7–8	87.0	7.9	5.1	23.9	(2)
Other middle	73.1	12.6	14.3	23.2	(2)
Secondary school grade configuration					
Grades 7–9	91.8	5.5	2.6	24.6	(2)
Other secondary	90.8	7.2	2.0	21.7	(2)

Table 6—Percentage distribution of public school teachers according to type of class organization, and average class size for teachers in departments and self-contained classrooms, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Percentage of teachers in			Average class size[1] in	
	Departments	Self-contained classrooms	Team-taught classes	Departments	Self-contained classrooms
			1987–88		
Total	53.5	41.4	5.1	23.8	24.5
School level					
Elementary	18.7	74.2	7.1	(2)	24.6
Middle	81.2	11.4	7.4	24.8	(2)
Secondary	87.6	10.6	1.8	23.7	(2)
Combined/ungraded only	58.8	37.2	3.9	20.5	23.5
Middle school grade configuration					
Grades 6–8	81.2	10.7	8.1	25.3	(2)
Grades 7–8	86.8	9.0	4.1	24.4	(2)
Other middle	72.3	17.3	10.4	23.6	(2)
Secondary school grade configuration					
Grades 7–9	88.2	10.0	1.8	24.3	(2)
Other secondary	87.5	10.6	1.9	23.7	(2)

[1]See the technical notes (appendix C) for details on how class size was calculated.

[2]Data excluded for teachers at these school levels (see below).

NOTE: Teachers of elementary enrichment and "pull-out" classes (13 percent of all teachers) are excluded from this table, so the percentage distributions in the first three columns are based on a total of the three class types included. Teachers with special education as their main assignment field were also excluded from self-contained classroom columns. Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 7—Percentage of public schools offering various instruction-related services, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Remedial reading/ English	Remedial mathematics	Gifted and talented program	Disabilities services	Magnet program	Bilingual instruction	ESL instruction	Chapter 1 services	Library/ media center
					1993–94				
Total	80.9	61.0	70.7	89.2	6.5	17.8	42.7	61.6	95.6
School level									
Elementary	87.3	59.4	72.2	89.4	6.2	19.0	44.2	74.2	96.5
Middle	73.5	61.6	79.3	90.0	6.8	17.7	48.5	50.5	98.3
Secondary	69.4	64.4	64.8	88.4	7.5	14.6	37.3	34.2	94.7
Combined/ungraded only	71.3	63.3	47.2	86.7	4.7	17.1	27.3	54.7	77.1
Middle school grade configuration									
Grades 6–8	74.3	62.6	78.8	90.4	6.2	18.1	51.8	46.4	98.8
Grades 7–8	71.0	56.5	77.0	84.5	9.3	15.9	46.9	46.8	99.4
Other middle	74.4	64.8	83.7	95.8	5.5	18.9	39.9	68.6	95.3
Secondary school grade configuration									
Grades 7–9	74.0	64.5	82.6	93.8	3.9	16.0	46.3	41.2	100.0
Other secondary	69.1	64.4	63.4	87.9	7.8	14.5	36.6	33.6	94.3
					1990–91				
Total	80.7	60.3	74.9	85.7	(*)	18.8	40.8	66.5	95.8
School level									
Elementary	84.7	58.3	76.9	83.9	(*)	20.4	42.0	77.2	96.5
Middle	78.1	61.7	83.5	89.6	(*)	19.8	46.7	52.5	98.9
Secondary	72.0	64.8	68.4	87.8	(*)	14.2	36.8	43.5	94.5
Combined/ungraded only	75.8	62.4	56.6	89.0	(*)	17.3	27.9	67.8	86.1
Middle school grade configuration									
Grades 6–8	79.0	63.1	83.2	90.1	(*)	19.7	49.4	50.4	99.6
Grades 7–8	74.3	60.1	83.2	90.8	(*)	19.8	44.7	43.7	97.0
Other middle	80.7	59.0	85.3	86.1	(*)	20.0	40.6	73.3	99.0
Secondary school grade configuration									
Grades 7–9	80.4	64.0	84.8	90.9	(*)	20.5	48.6	44.2	97.8
Other secondary	71.1	64.9	66.8	87.5	(*)	13.5	35.7	43.4	94.2

Table 7—Percentage of public schools offering various instruction-related services, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Remedial reading/ English	Remedial mathe-matics	Gifted and talented program	Disa-bilities services	Magnet program	Bilingual instruc-tion	ESL instruc-tion	Chapter 1 services	Library/ media center
					1987–88				
Total	80.4	60.1	72.5	90.5	(*)	20.0	34.4	59.7	(*)
School level									
Elementary	82.1	55.7	75.6	88.8	(*)	21.0	34.8	71.1	(*)
Middle	84.9	66.9	82.2	96.7	(*)	22.3	41.4	49.8	(*)
Secondary	74.7	68.0	65.4	91.9	(*)	16.9	33.7	31.3	(*)
Combined/ungraded only	75.2	62.8	47.6	91.5	(*)	16.6	19.6	64.5	(*)
Middle school grade configuration									
Grades 6–8	87.3	69.1	82.5	96.7	(*)	23.6	45.2	49.0	(*)
Grades 7–8	81.8	70.7	81.0	96.4	(*)	24.0	44.5	38.1	(*)
Other middle	83.0	56.7	82.9	97.2	(*)	17.0	27.8	66.9	(*)
Secondary school grade configuration									
Grades 7–9	83.6	72.5	84.1	95.8	(*)	19.7	43.4	37.4	(*)
Other secondary	73.5	67.4	62.9	91.3	(*)	16.6	32.3	30.4	(*)

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1987–88, 1990–91, and 1993–94.

Table 8—Percentage of public schools offering various health-related services, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Diagnostic and prescriptive services	Medical services	Drug and alcohol prevention	Substance abuse counseling	Free/ reduced-price lunch
			1993–94		
Total	82.6	58.7	93.6	36.2	94.3
School level					
Elementary	83.3	57.6	95.0	25.6	95.5
Middle	82.8	62.8	93.3	49.2	95.6
Secondary	80.4	59.2	92.1	56.4	91.6
Combined/ungraded only	82.3	58.8	80.6	42.9	84.8
Middle school grade configuration					
Grades 6–8	83.7	62.4	93.7	50.1	95.6
Grades 7–8	80.7	61.9	91.9	51.6	94.4
Other middle	82.5	65.0	93.9	43.1	97.3
Secondary school grade configuration					
Grades 7–9	79.8	61.2	95.4	57.0	97.7
Other secondary	80.4	59.0	91.9	56.3	91.2
			1990–91		
Total	80.4	(*)	(*)	(*)	95.5
School level					
Elementary	81.7	(*)	(*)	(*)	96.3
Middle	79.1	(*)	(*)	(*)	98.1
Secondary	76.7	(*)	(*)	(*)	93.2
Combined/ungraded only	82.8	(*)	(*)	(*)	88.6
Middle school grade configuration					
Grades 6–8	77.7	(*)	(*)	(*)	99.0
Grades 7–8	80.8	(*)	(*)	(*)	95.5
Other middle	81.7	(*)	(*)	(*)	98.7
Secondary school grade configuration					
Grades 7–9	85.8	(*)	(*)	(*)	97.7
Other secondary	75.8	(*)	(*)	(*)	92.8

Table 8—Percentage of public schools offering various health-related services, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Diagnostic and prescriptive services	Medical services	Drug and alcohol prevention	Substance abuse counseling	Free/ reduced-price lunch
			1987–88		
Total	72.6	(*)	(*)	(*)	99.3
School level					
Elementary	72.4	(*)	(*)	(*)	99.6
Middle	73.9	(*)	(*)	(*)	99.7
Secondary	71.8	(*)	(*)	(*)	98.4
Combined/ungraded only	75.5	(*)	(*)	(*)	98.6
Middle school grade configuration					
Grades 6–8	74.3	(*)	(*)	(*)	99.7
Grades 7–8	75.5	(*)	(*)	(*)	99.6
Other middle	70.8	(*)	(*)	(*)	100.0
Secondary school grade configuration					
Grades 7–9	74.4	(*)	(*)	(*)	99.6
Other secondary	71.4	(*)	(*)	(*)	98.3

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 9—Percentage of public schools that had decision-making bodies other than school boards, student councils, or PTAs, and percentage of these bodies that included certain groups,* by school level and grade configuration: 1993–94

	Percentage of schools with such a body	Percentage of decision-making bodies with:				
		Teachers	Principal or vice-principal	Parents	Students	Superintendent or district or community representatives
Total	55.5	95.2	96.0	79.1	27.6	48.0
School level						
Elementary	55.3	95.5	96.6	82.0	15.0	46.0
Middle	59.5	96.3	97.4	77.7	35.5	45.9
Secondary	53.7	94.6	94.2	72.5	56.7	52.8
Combined/ungraded only	54.2	88.0	90.0	73.6	37.5	64.1
Middle school grade configuration						
Grades 6–8	61.8	97.9	97.5	79.4	35.7	45.8
Grades 7–8	57.9	93.5	96.3	76.3	43.7	42.4
Other middle	54.4	94.3	98.6	73.5	23.3	50.9
Secondary school grade configuration						
Grades 7–9	62.8	97.1	97.8	77.0	50.5	41.0
Other secondary	53.0	94.4	93.9	72.0	57.3	53.9

*The groups included as response options were teachers, principal, assistant/vice-principal, students, parents, superintendent/district representative, and other community representatives.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaires): 1993–94.

Table 10—Percentage of public schools' site-based decision-making bodies that had various functions or areas of responsibility, by school level and grade configuration: 1993–94

	Areas of responsibility					
	School resource issues	Aids principal with budget or spending issues	Confers on school personnel issues	Considers input on curriculum or discipline issues	Plans transportation routes	School and district liaisons on operations
Total	75.3	66.1	33.6	82.9	4.5	34.0
School level						
Elementary	75.5	69.3	31.9	83.7	4.2	32.1
Middle	80.5	67.9	36.2	84.2	4.8	36.9
Secondary	71.6	57.8	34.2	80.9	3.9	36.9
Combined/ungraded only	70.5	54.4	47.3	76.1	10.7	36.7
Middle school grade configuration						
Grades 6–8	82.5	69.0	36.8	86.8	4.9	37.8
Grades 7–8	74.9	62.4	35.2	81.6	6.2	41.3
Other middle	80.8	71.0	35.4	78.3	—	27.7
Secondary school grade configuration						
Grades 7–9	73.1	59.7	33.0	82.8	2.5	29.6
Other secondary	71.5	57.6	34.4	80.7	4.0	37.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaires): 1993–94.

Table 11—Percentage of public school principals who reported that they had a lot of influence[1] on decisions in various school management areas, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	School budget decisions	Hiring full-time teachers	Establishing curriculum	Determining the content of inservice training	Teacher evaluation	Setting discipline policy
			1993–94			
Total	63.5	84.6	53.9	72.4	94.5	86.9
School level						
Elementary	64.1	82.7	50.8	72.2	94.5	85.3
Middle	65.3	88.0	58.4	74.8	94.9	87.4
Secondary	60.0	87.9	59.1	71.2	95.1	90.1
Combined/ungraded only	65.6	82.1	57.6	73.3	93.4	86.3
Middle school grade configuration						
Grades 6–8	66.8	87.8	56.7	71.7	94.5	85.6
Grades 7–8	60.7	86.5	53.0	77.2	96.0	89.0
Other middle	66.1	90.8	70.6	81.4	94.9	91.1
Secondary school grade configuration						
Grades 7–9	65.2	86.0	52.9	70.9	95.5	88.0
Other secondary	59.6	88.1	59.6	71.2	95.1	90.3
			1990–91			
Total	(2)	81.4	49.1	(2)	(2)	84.5
School level						
Elementary	(2)	79.9	46.9	(2)	(2)	83.6
Middle	(2)	83.7	46.4	(2)	(2)	84.8
Secondary	(2)	85.4	55.8	(2)	(2)	88.3
Combined/ungraded only	(2)	77.8	56.2	(2)	(2)	82.7
Middle school grade configuration						
Grades 6–8	(2)	84.1	45.8	(2)	(2)	83.7
Grades 7–8	(2)	82.0	43.2	(2)	(2)	88.1
Other middle	(2)	85.0	53.4	(2)	(2)	83.7
Secondary school grade configuration						
Grades 7–9	(2)	82.8	40.4	(2)	(2)	83.7
Other secondary	(2)	85.6	57.3	(2)	(2)	88.7

Table 11—Percentage of public school principals who reported that they had a lot of influence[1] on decisions in various school management areas, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School budget decisions	Hiring full-time teachers	Establishing curriculum	Determining the content of inservice training	Teacher evaluation	Setting discipline policy
			1987–88			
Total	(2)	75.1	54.4	(2)	(2)	80.6
School level						
Elementary	(2)	72.8	50.6	(2)	(2)	79.0
Middle	(2)	79.2	53.7	(2)	(2)	83.1
Secondary	(2)	79.7	62.3	(2)	(2)	83.5
Combined/ungraded only	(2)	75.2	65.2	(2)	(2)	80.8
Middle school grade configuration						
Grades 6–8	(2)	76.9	52.8	(2)	(2)	81.4
Grades 7–8	(2)	81.5	56.0	(2)	(2)	86.0
Other middle	(2)	82.0	52.7	(2)	(2)	83.2
Secondary school grade configuration						
Grades 7–9	(2)	75.3	46.7	(2)	(2)	81.4
Other secondary	(2)	80.3	64.4	(2)	(2)	83.8

[1]Ratings of influence are counted as "a lot" if respondents marked one of the highest two numbers (5 or 6) on a 6-point scale.
[2]Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 12—Percentage of public school teachers who reported that teachers had a lot of influence[1] on decisions in various school management areas, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	School budget decisions	Hiring full-time teachers	Establishing curriculum	Determining the content of inservice training	Teacher evaluation	Setting discipline policy
			1993–94			
Total	10.1	8.1	34.3	30.6	2.7	34.9
School level						
Elementary	12.1	9.3	32.1	32.7	2.6	42.2
Middle	9.8	9.0	36.3	28.3	2.4	31.4
Secondary	7.2	6.0	37.6	28.5	3.0	25.0
Combined/ungraded only	9.7	8.7	36.5	31.4	3.2	35.6
Middle school grade configuration						
Grades 6–8	11.1	9.5	36.7	28.2	2.6	30.6
Grades 7–8	8.1	7.3	36.3	29.1	2.5	32.0
Other middle	6.5	8.6	34.6	27.7	1.5	33.6
Secondary school grade configuration						
Grades 7–9	8.7	5.7	32.2	29.7	2.4	28.8
Other secondary	7.1	6.0	38.0	28.4	3.1	24.7
			1990–91			
Total	(2)	(2)	35.2	32.9	(2)	37.0
School level						
Elementary	(2)	(2)	32.5	35.2	(2)	46.1
Middle	(2)	(2)	34.8	28.4	(2)	31.4
Secondary	(2)	(2)	39.4	31.2	(2)	25.9
Combined/ungraded only	(2)	(2)	38.5	33.1	(2)	38.7
Middle school grade configuration						
Grades 6–8	(2)	(2)	35.4	28.4	(2)	31.9
Grades 7–8	(2)	(2)	33.3	28.0	(2)	31.6
Other middle	(2)	(2)	34.4	29.3	(2)	28.8
Secondary school grade configuration						
Grades 7–9	(2)	(2)	32.3	28.7	(2)	31.0
Other secondary	(2)	(2)	40.1	31.4	(2)	25.4

Table 12—Percentage of public school teachers who reported that teachers had a lot of influence[1] on decisions in various school management areas, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School budget decisions	Hiring full-time teachers	Establishing curriculum	Determining the content of inservice training	Teacher evaluation	Setting discipline policy
			1987–88			
Total	(2)	(2)	35.0	31.1	(2)	34.9
School level						
Elementary	(2)	(2)	32.9	33.7	(2)	45.3
Middle	(2)	(2)	35.0	28.7	(2)	30.8
Secondary	(2)	(2)	37.2	28.3	(2)	21.9
Combined/ungraded only	(2)	(2)	40.3	32.2	(2)	35.5
Middle school grade configuration						
Grades 6–8	(2)	(2)	33.9	29.5	(2)	30.2
Grades 7–8	(2)	(2)	36.6	28.0	(2)	31.0
Other middle	(2)	(2)	36.2	27.3	(2)	32.5
Secondary school grade configuration						
Grades 7–9	(2)	(2)	32.9	28.6	(2)	26.2
Other secondary	(2)	(2)	37.7	28.2	(2)	21.3

[1]Ratings of influence are counted as "a lot" if respondents marked one of the highest two numbers (5 or 6) on a 6-point scale.
[2]Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 13—Percentage distribution of public school teachers according to type of certification they had in their main and other assignment field, by school level and grade configuration: 1993–94

School characteristics	Certification in main assignment field				Certification in other assignment field			
	Advanced	Regular or alternative*	Provisional, probationary, temporary, or emergency	No certification	Advanced	Regular or alternative*	Provisional, probationary, temporary, or emergency	No certification
Total	14.8	76.1	5.5	3.6	7.8	48.8	3.8	39.6
School level								
Elementary	13.9	78.0	5.0	3.1	7.1	45.0	3.9	44.1
Middle	14.5	72.4	6.8	6.2	6.3	47.7	3.6	42.4
Secondary	16.2	75.7	5.4	2.7	9.3	52.7	4.1	34.0
Combined/ungraded only	14.9	73.5	7.4	4.2	7.3	45.2	3.6	43.8
Middle school grade configuration								
Grades 6–8	14.6	70.7	7.4	7.2	6.5	45.1	4.0	44.4
Grades 7–8	13.7	75.9	5.9	4.6	4.6	51.5	3.5	40.4
Other middle	15.4	75.1	5.5	3.9	6.9	55.4	1.7	36.0
Secondary school grade configuration								
Grades 7–9	13.4	78.3	5.0	3.3	12.2	50.6	3.2	33.9
Other secondary	16.4	75.5	5.4	2.6	9.0	52.9	4.1	34.0

*Only about 1 percent of public school teachers had alternative certification in their main assignment field in 1993–94. U.S. Department of Education, National Center for Educational Statistics, *Schools and Staffing in the United States: A Statistical Profile, 1993–94* (NCES 96–124), Robin Henke, Susan Choy, and Sonya Geis (Washington, DC: 1996), 58.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table 14—Percentage distribution of public middle and secondary school core subject teachers in departments according to type of certification in their main assignment field, by field and school level: 1993–94

Field and school level	Advanced	Regular or alternative*	Provisional, probationary, temporary, or emergency	No certification
Total	15.7	75.2	5.5	3.6
Mathematics	14.0	75.6	6.6	3.9
Middle schools	12.9	72.3	7.9	6.9
Secondary schools	14.4	77.1	6.0	2.5
Science	15.6	75.0	5.1	4.3
Middle schools	16.7	72.1	3.5	7.7
Secondary schools	15.1	76.3	5.8	2.8
English	17.5	73.9	5.0	3.6
Middle schools	16.4	68.7	7.7	7.2
Secondary schools	18.2	76.9	3.4	1.5
Social science	15.7	76.3	4.8	3.2
Middle schools	10.8	76.3	6.5	6.5
Secondary schools	17.8	76.3	4.1	1.8
Foreign language	13.9	75.1	7.2	3.8
Middle schools	9.4	71.4	11.8	7.4
Secondary schools	14.9	76.0	6.2	2.9

*Only about 1 percent of public school teachers had alternative certification in their main assignment field in 1993–94. U.S. Department of Education, National Center for Educational Statistics, *Schools and Staffing in the United States: A Statistical Profile, 1993–94* (NCES 96–124), Robin Henke, Susan Choy, and Sonya Geis (Washington, DC: 1996), 58.

NOTE: Percentages may not sum to 100 due to rounding. Only teachers of departmentalized classes in middle and secondary schools are included in this table.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table 15—Percentage distributions of public school teachers according to highest degree earned and years of teaching experience, and average years of experience, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Highest degree			Years of experience				
	Bachelor's or less*	Master's	Higher than a master's degree	3 or fewer years	4–9 years	10–19 years	20 or more years	Average years
				1993–94				
Total	52.7	42.0	5.3	12.2	20.6	31.8	35.4	15.2
School level								
Elementary	55.5	40.0	4.6	12.0	21.7	32.6	33.7	14.9
Middle	52.5	42.1	5.5	13.6	21.4	31.8	33.2	14.6
Secondary	47.8	46.0	6.2	11.2	18.3	30.8	39.8	16.1
Combined/ungraded only	55.8	37.8	6.4	15.1	22.4	32.6	29.9	13.9
Middle school grade configuration								
Grades 6–8	52.9	41.6	5.5	14.9	21.3	32.4	31.5	14.2
Grades 7–8	53.0	41.2	5.8	11.3	22.5	31.7	34.5	15.0
Other middle	49.6	45.5	4.9	11.0	20.4	29.4	39.2	15.9
Secondary school grade configuration								
Grades 7–9	55.6	40.1	4.3	12.2	22.4	32.3	33.1	14.8
Other secondary	47.2	46.4	6.4	11.1	18.0	30.7	40.3	16.2
				1990–91				
Total	54.6	40.0	5.4	10.7	19.9	37.1	32.4	15.1
School level								
Elementary	58.6	36.8	4.6	11.6	20.6	38.0	29.8	14.6
Middle	52.2	42.7	5.0	10.9	20.3	36.0	32.8	15.1
Secondary	49.5	43.8	6.6	8.8	18.0	36.5	36.6	16.0
Combined/ungraded only	55.5	38.6	5.9	13.3	22.7	37.1	26.9	13.8
Middle school grade configuration								
Grades 6–8	53.3	42.1	4.6	11.4	21.4	34.6	32.6	14.9
Grades 7–8	50.6	43.1	6.4	11.0	18.0	38.0	33.0	15.6
Other middle	50.3	44.8	5.0	8.8	19.3	38.6	33.3	15.4
Secondary school grade configuration								
Grades 7–9	51.5	42.6	5.8	11.1	20.8	39.5	28.6	14.5
Other secondary	49.4	44.0	6.7	8.6	17.8	36.2	37.4	16.2

Table 15—Percentage distributions of public school teachers according to highest degree earned and years of teaching experience, and average years of experience, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Highest degree			Years of experience				
	Bachelor's or less*	Master's	Higher than a master's degree	3 or fewer years	4–9 years	10–19 years	20 or more years	Average years
				1987–88				
Total	52.8	40.1	7.1	9.9	20.8	42.3	27.0	14.6
School level								
Elementary	57.1	36.9	6.0	10.4	21.7	42.5	25.4	14.2
Middle	50.2	42.2	7.6	8.4	20.1	43.9	27.6	14.9
Secondary	47.4	44.5	8.0	9.0	19.4	41.9	29.6	15.1
Combined/ungraded only	58.3	35.3	6.4	12.6	24.8	40.1	22.6	13.4
Middle school grade configuration								
Grades 6–8	48.7	43.2	8.1	7.4	20.8	44.0	27.8	14.9
Grades 7–8	49.8	42.1	8.1	8.7	19.2	42.4	29.6	15.2
Other middle	55.5	39.4	5.0	10.5	19.6	45.6	24.3	14.4
Secondary school grade configuration								
Grades 7–9	51.4	42.2	6.4	10.1	20.5	42.6	26.8	14.3
Other secondary	46.9	44.8	8.2	8.9	19.2	41.9	30.0	15.2

*Only 0.7 percent of public school teachers had attained less than a bachelor's degree in 1993–94. U.S. Department of Education, National Center for Educational Statistics, *Schools and Staffing in the United States: A Statistical Profile, 1993–94 (NCES 96–124)*, Robin Henke, Susan Choy, and Sonya Geis (Washington, DC: 1996), 54.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 16—Percentage of teachers who participated in an inservice or professional development program that focused on various topics since the end of the last school year, by school level and grade configuration: 1993–94

School characteristics	Uses of educational technology for instruction	Methods of teaching in their fields	In-depth study in their subject	Student assessment	Cooperative learning in the classroom
Total	49.4	64.0	30.1	51.4	50.9
School level					
Elementary	48.4	71.5	32.4	55.7	51.8
Middle	50.4	59.2	29.0	50.2	52.2
Secondary	50.8	54.5	27.2	45.2	48.4
Combined/ungraded only	46.6	60.1	26.5	44.8	47.3
Middle school grade configuration					
Grades 6–8	50.6	58.6	28.8	49.9	52.3
Grades 7–8	49.1	58.2	29.4	48.8	51.6
Other middle	51.3	63.5	29.4	53.2	52.2
Secondary school grade configuration					
Grades 7–9	48.8	55.2	23.8	47.3	51.6
Other secondary	51.0	54.4	27.5	45.1	48.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table 17—Of public school teachers who had participated in recent inservice training on various topics,[1] the percentages who agreed[2] with a range of statements about the training's effects, by school level and grade configuration: 1993–94

School characteristics	Provided information new to me	Caused me to seek more information or training	Caused change in my teaching practices	Changed my views on teaching	Generally a waste of time
Total	84.9	62.6	64.7	41.8	10.5
School level					
Elementary	86.1	65.4	68.3	44.0	8.3
Middle	83.5	61.5	64.2	42.0	11.4
Secondary	83.6	58.8	59.1	38.5	13.7
Combined/ungraded only	83.9	61.0	61.4	40.4	11.0
Middle school grade configuration					
Grades 6–8	83.9	61.3	64.7	42.3	11.0
Grades 7–8	81.4	62.8	63.7	40.9	12.1
Other middle	84.5	60.6	62.9	41.8	12.2
Secondary school grade configuration					
Grades 7–9	81.0	56.4	59.3	38.7	13.0
Other secondary	83.8	59.0	59.0	38.4	13.8

[1]The five topics were the uses of educational technology, teaching methods in their subject, in-depth study of their subject, student assessment, and cooperative learning in the classroom.

[2]Teachers who reported that they agreed or strongly agreed with the statements are included in this table. Other response options were "no opinion," "disagree," and "strongly disagree."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table 18—Percentage distributions of public school principals according to highest degree earned and years of experience as a principal, and average years of experience, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Highest degree earned			Years of experience as principal			Average years as principal	
	Bachelor's or less*	Master's or education specialist	Doctorate or professional	3 or fewer	4–9 years	10 or more years	Total	At current school
				1993–94				
Total	1.4	63.4	35.2	22.8	37.5	39.7	9.6	6.0
School level								
Elementary	1.7	64.1	34.2	21.7	37.4	40.9	10.1	6.0
Middle	0.9	65.9	33.1	27.0	35.0	38.0	9.0	5.8
Secondary	1.0	61.8	37.2	22.8	38.8	38.4	9.1	6.0
Combined/ungraded only	2.6	60.2	37.2	29.1	37.4	33.6	8.5	5.3
Middle school grade configuration								
Grades 6–8	0.7	66.3	33.0	29.0	33.2	37.8	9.0	5.9
Grades 7–8	2.3	72.0	25.7	22.8	41.7	35.5	8.7	5.6
Other middle	—	56.9	43.1	25.9	32.3	41.8	9.4	5.7
Secondary school grade configuration								
Grades 7–9	—	55.2	44.8	32.1	36.7	31.2	8.1	5.4
Other secondary	1.1	62.4	36.6	22.1	39.0	39.0	9.2	6.1
				1990–91				
Total	1.8	60.5	37.6	21.1	34.6	44.3	10.3	6.7
School level								
Elementary	1.8	60.8	37.4	20.2	34.7	45.1	10.7	6.7
Middle	1.6	61.8	36.6	22.5	33.2	44.3	9.9	6.8
Secondary	1.7	60.4	37.9	20.0	35.9	44.1	10.0	6.9
Combined/ungraded only	3.4	56.2	40.4	31.0	32.3	36.6	9.1	6.0
Middle school grade configuration								
Grades 6–8	0.9	61.3	37.8	23.0	33.4	43.6	9.7	6.9
Grades 7–8	0.8	66.5	32.7	18.6	37.2	44.2	10.1	6.4
Other middle	—	56.5	38.4	26.5	26.4	47.0	10.4	7.0
Secondary school grade configuration								
Grades 7–9	—	57.2	42.7	14.7	41.7	43.5	10.3	7.0
Other secondary	1.8	60.7	37.4	20.5	35.4	44.2	10.0	6.9

Table 18—Percentage distributions of public school principals according to highest degree earned and years of experience as a principal, and average years of experience, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Highest degree earned			Years of experience as principal			Average years as principal	
	Bachelor's or less*	Master's or education specialist	Doctorate or professional	3 or fewer	4–9 years	10 or more years	Total	At current school
				1987–88				
Total	2.4	53.4	44.1	18.8	32.4	48.8	11.0	7.2
School level								
Elementary	2.9	54.6	42.4	18.4	31.0	50.5	11.5	7.3
Middle	0.4	54.9	44.7	21.8	30.5	47.7	10.4	7.4
Secondary	1.4	49.4	49.2	16.7	35.5	47.8	10.3	7.3
Combined/ungraded only	5.4	51.6	43.0	22.5	36.7	40.8	9.4	6.8
Middle school grade configuration								
Grades 6–8	—	52.8	47.2	20.6	29.0	50.3	10.7	7.6
Grades 7–8	—	59.9	39.1	20.5	32.4	47.1	10.8	7.4
Other middle	—	53.4	46.2	26.5	31.5	41.9	9.3	7.1
Secondary school grade configuration								
Grades 7–9	—	48.4	51.2	18.7	32.4	48.9	10.7	7.0
Other secondary	1.5	49.5	49.0	16.5	35.9	47.6	10.3	7.4

—Too few sample observations for a reliable estimate.

*Fewer than 1 percent of public school principals had attained less than a bachelor's degree in 1993–94.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 19—Percentage of principals who had received various types of training for school administration, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Training or development program for aspiring principals	Other training			
		Inservice training in evaluation and supervision	Training in management techniques	Administrative internship	None of these types of training
			1993–94		
Total	38.9	86.5	74.7	41.2	7.5
School level					
Elementary	39.5	86.8	74.7	40.5	7.5
Middle	38.4	86.1	72.8	45.3	6.7
Secondary	36.6	86.6	74.9	40.3	7.7
Combined/ungraded only	39.9	85.7	74.7	47.0	8.3
Middle school grade configuration					
Grades 6–8	39.5	86.8	73.2	47.2	6.6
Grades 7–8	37.1	86.3	75.5	44.7	6.7
Other middle	36.6	83.8	68.0	39.8	6.8
Secondary school grade configuration					
Grades 7–9	42.0	82.2	74.7	49.4	6.5
Other secondary	36.2	87.0	75.0	39.6	7.8
			1990–91		
Total	35.9	87.4	74.4	37.5	7.1
School level					
Elementary	36.9	86.8	73.2	37.3	7.7
Middle	35.8	88.3	76.7	36.7	5.0
Secondary	33.2	88.6	75.6	38.3	6.9
Combined/ungraded only	31.3	88.3	76.9	38.9	5.3
Middle school grade configuration					
Grades 6–8	36.5	88.8	79.1	38.7	4.9
Grades 7–8	34.0	86.4	71.0	39.2	6.0
Other middle	36.2	89.3	77.0	26.0	4.1
Secondary school grade configuration					
Grades 7–9	44.9	93.2	80.6	43.8	3.7
Other secondary	32.1	88.1	75.1	37.8	7.2

Table 19—Percentage of principals who had received various types of training for school administration, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Training or development program for aspiring principals	Other training			
		Inservice training in evaluation and supervision	Training in management techniques	Administrative internship	None of these types of training
			1987–88		
Total	(*)	89.3	73.6	36.9	6.5
School level					
Elementary	(*)	89.0	72.3	36.6	6.5
Middle	(*)	89.7	75.5	33.3	6.7
Secondary	(*)	89.8	75.7	37.4	6.4
Combined/ungraded only	(*)	88.3	68.2	39.6	7.7
Middle school grade configuration					
Grades 6–8	(*)	92.0	80.2	33.6	5.0
Grades 7–8	(*)	86.4	70.4	34.2	9.1
Other middle	(*)	88.5	70.6	31.4	7.9
Secondary school grade configuration					
Grades 7–9	(*)	91.5	74.8	39.7	6.3
Other secondary	(*)	89.6	75.9	37.2	6.4

*Data not collected for this variable in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 20—Percentage of public schools with teaching vacancies that found them very difficult or impossible to fill, and percentage that used various strategies for filling them, by school level and grade configuration: 1993–94

School characteristics	Percent with great difficulty filling vacancies	Methods used to fill vacancies						
		Hired qualified teacher	Hired less than qualified teacher	Used substitute teacher	Assigned other teacher or administrator	Expanded class sizes	Increased teaching loads	Other
Total	23.3	94.8	7.4	15.1	5.2	5.8	31.9	3.4
School level								
Elementary	15.7	94.6	5.8	13.5	2.8	4.7	2.2	2.4
Middle	31.2	94.7	7.7	18.3	8.1	5.3	52.7	3.3
Secondary	34.4	96.0	9.9	15.9	7.9	8.2	88.9	4.6
Combined/ungraded only	36.1	90.8	14.3	21.5	11.8	9.6	37.2	11.1
Middle school grade configuration								
Grades 6–8	31.1	93.3	7.3	20.6	8.9	5.0	50.9	2.5
Grades 7–8	36.0	96.8	10.2	16.7	8.0	7.4	79.0	4.2
Other middle	24.8	96.9	5.8	12.0	5.3	3.7	23.4	4.8
Secondary school grade configuration								
Grades 7–9	35.8	93.9	10.7	21.1	11.0	8.5	81.6	2.1
Other secondary	34.3	96.1	9.8	15.4	7.6	8.2	89.5	4.8

NOTE: The base for each column is schools that had at least one teaching vacancy. Column 1 contains the percentages of schools reporting a vacancy that was very difficult or impossible to fill. (Other options were "somewhat difficult" and "easy" to fill.) The other columns contain the percentages of schools that used one of the specified methods to fill any vacancy (percentages may sum to more than 100 because schools could use more than one method).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaires): 1993–94.

Table 21—Ratio of students per full-time-equivalent teacher in public schools, and percentage of public schools with librarians and counselors, by school level and grade configuration: 1993–94

School characteristics	Students per FTE teacher	Percentage of schools with: Librarians or media specialists	Counselors
Total	17.0	99.8	79.7
School level			
Elementary	17.9	100.0	71.7
Middle	16.5	99.9	94.4
Secondary	15.7	99.5	94.5
Combined/ungraded only	12.6	99.8	67.8
Middle school grade configuration			
Grades 6–8	16.6	100.0	96.9
Grades 7–8	16.2	99.5	92.1
Other middle	16.3	100.0	89.3
Secondary school grade configuration			
Grades 7–9	17.1	100.0	99.1
Other secondary	15.6	99.4	94.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table 22—Percentage distribution of public school teachers according to their teaching status the following school year, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Stayed at same school	Moved to different school	Left teaching
		1993–94	
Total	86.3	7.2	6.6
School level			
Elementary	86.2	7.4	6.4
Middle	82.8	8.9	8.3
Secondary	87.6	5.7	6.7
Combined/ungraded only	87.8	7.0	5.2
Middle school grade configuration			
Grades 6–8	80.5	10.8	8.6
Grades 7–8	86.9	6.4	6.7
Other middle	85.6	4.9	9.4
Secondary school grade configuration			
Grades 7–9	84.5	8.7	6.8
Other secondary	87.8	5.5	6.7
		1990–91	
Total	87.6	7.3	5.1
School level			
Elementary	86.4	8.3	5.3
Middle	86.1	8.0	5.9
Secondary	90.1	5.2	4.7
Combined/ungraded only	85.9	8.7	5.4
Middle school grade configuration			
Grades 6–8	85.6	8.2	6.3
Grades 7–8	84.7	8.7	6.6
Other middle	91.1	6.1	2.8
Secondary school grade configuration			
Grades 7–9	90.2	5.7	4.2
Other secondary	90.1	5.2	4.8

Table 22—Percentage distribution of public school teachers according to their teaching status the following school year, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Stayed at same school	Moved to different school	Left teaching
		1987–88	
Total	86.5	7.9	5.6
School level			
Elementary	85.6	9.1	5.3
Middle	88.7	7.0	4.3
Secondary	87.9	6.5	5.6
Combined/ungraded only	87.5	5.6	6.9
Middle school grade configuration			
Grades 6–8	90.2	5.8	4.0
Grades 7–8	90.4	5.9	3.7
Other middle	78.6	14.5	6.9
Secondary school grade configuration			
Grades 7–9	86.0	8.6	5.4
Other secondary	88.1	6.3	5.6

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-Up Survey: 1988–89, 1991–92, and 1994–95.

Table 23—Percentage of public school principals who rated various goals as one of their top three, by school level and grade configuration: 1993–94

	Basic literacy skills	Academic excellence	Good work habits/ self-discipline	Personal growth	Human relations skills	Occupational/ vocational skills	Multicultural awareness	Specific moral values
Total	72.1	62.9	57.7	50.3	24.3	15.2	11.2	6.3
School level								
Elementary	76.7	60.9	58.7	53.8	24.5	7.6	11.9	6.0
Middle	68.4	65.2	58.4	50.8	25.5	15.1	9.2	7.5
Secondary	63.0	67.3	56.3	42.5	22.9	31.8	9.9	6.5
Combined/ungraded on	69.9	51.1	55.1	45.0	20.4	40.6	9.0	9.0
Middle school grade configuration								
Grades 6–8	68.1	67.6	59.1	47.6	26.1	14.5	9.6	7.4
Grades 7–8	67.5	61.1	56.9	53.8	26.2	19.2	7.4	7.8
Other middle	70.4	62.6	57.7	57.1	22.5	12.0	10.5	7.2
Secondary school grade configuration								
Grades 7–9	67.6	60.6	57.4	46.0	28.8	19.3	11.1	9.1
Other secondary	62.6	67.8	56.2	42.2	22.4	32.9	9.8	6.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1993–94.

Table 24—Percentage of public school teachers who had their students engage in various activities in class at least once a week, by school level* and grade configuration: 1994–95

School characteristics	Lead or participate in whole-group discussions	Respond orally to open-ended questions	Used printed material other than textbooks	Work on group projects or presentations	Confer with other students or evaluate their work	Work on problems with several answers or methods of solution	Explain links between class learning and real world	Evaluate and improve own work
Total	82.2	85.4	78.8	37.1	69.8	66.2	63.4	61.0
School level								
Elementary	89.1	91.0	85.2	37.1	71.4	72.3	69.6	66.4
Middle	79.4	80.2	75.0	37.2	66.4	60.6	60.8	59.6
Secondary	74.3	81.2	69.9	35.5	68.4	60.5	55.9	56.0
Combined/ungraded only	74.1	82.9	80.0	30.1	62.8	55.6	72.8	61.5
Middle school grade configuration								
Grades 6–8	77.8	77.7	77.4	42.1	72.3	66.2	59.9	60.1
Grades 7–8	85.8	84.5	68.3	23.8	64.4	55.2	61.2	55.4
Other middle	76.2	83.3	75.9	38.6	47.7	47.7	63.4	63.6
Secondary school grade configuration								
Grades 7–9	72.8	78.4	86.8	18.1	60.4	50.6	68.3	53.0
Other secondary	74.4	81.4	69.0	36.4	68.8	61.1	55.2	56.1

*Much of the variation in frequency of using particular instructional practices between elementary and higher grade levels likely stems from the greater amount of time that most elementary teachers spend each week with their students. For a fuller explanation, see the Instructional Practices section.

NOTE: Only teachers who taught at the same school in 1994–95 as the previous year are included in this table (these "stayers" constituted 86 percent of all 1993–94 public school teachers).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1994–95.

Table 25—Percentage of public school teachers who emphasized specific skills at least once a week, by school level* and grade configuration: 1994–95

School characteristics	Generalizing from patterns or examples	Analyzing and interpreting information	Organizing, summarizing, or displaying information
Total	76.8	81.7	78.1
School level			
Elementary	80.8	84.5	80.6
Middle	70.9	79.7	77.5
Secondary	75.0	81.5	76.6
Combined/ungraded only	83.3	72.7	75.2
Middle school grade configuration			
Grades 6–8	69.0	80.1	76.5
Grades 7–8	71.9	77.8	75.9
Other middle	76.6	80.6	83.7
Secondary school grade configuration			
Grades 7–9	59.2	63.9	66.3
Other secondary	75.8	82.4	77.1

*Much of the variation in frequency of using particular instructional practices between elementary and higher grade levels likely stems from the greater amount of time that most elementary teachers spend each week with their students. For a fuller explanation, see the Instructional Practices section.

NOTE: Only teachers who taught at the same school in 1994–95 as the previous year are included in this table (these "stayers" constituted 86 percent of all 1993–94 public school teachers).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1994–95.

Table 26—Percentage of public school teachers who assigned their students various homework activities at least once a week, by school level and grade configuration: 1994–95

School characteristics	Prepare written report	Prepare oral report	Work on problems with no obvious method of solution	Apply concepts to unfamiliar situation	Work on project, gather data, or conduct experiment	Write journal entry	Write short assignment
Total	14.1	8.3	12.9	42.2	22.7	28.3	43.8
School level							
Elementary	12.6	9.7	13.5	36.2	22.1	34.1	47.6
Middle	13.9	7.0	17.3	46.7	20.7	29.5	45.7
Secondary	17.5	6.2	11.9	49.1	22.6	21.6	39.6
Combined/ungraded only	6.3	—	7.7	52.6	22.5	16.9	37.5
Middle school grade configuration							
Grades 6–8	12.3	7.1	20.8	48.8	21.6	28.1	42.7
Grades 7–8	20.5	10.5	16.9	46.0	17.6	30.2	57.0
Other middle	10.4	—	—	40.4	21.7	33.3	40.8
Secondary school grade configuration							
Grades 7–9	8.4	—	8.7	34.7	25.4	16.7	36.7
Other secondary	18.0	6.2	12.1	49.8	22.4	21.8	39.7

—Too few sample observations for a reliable estimate.

NOTE: Only teachers who taught at the same school in 1994–95 as the previous year are included in this table (these "stayers" constituted 86 percent of all 1993–94 public school teachers).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1994–95.

Table 27—Percentage of public school teachers who agreed[1] with various statements about their schools, by school level and grade configuration: 1993–94 and 1987–88[2]

School characteristics	Teachers participate in important educational decisions	I receive a great deal of parent support	Administration's behavior is supportive, encouraging	Principal enforces school rules, backs me up	I try to coordinate course content with other teachers	Teachers are evaluated fairly	Principal makes expectations for staff clear	Principal does poor job of getting resources	Paperwork, routine duties interfere with my teaching	Some school rules conflict with my professional judgment	Doing my best is sometimes a waste of time
						1993–94					
Total	58.3	52.5	79.2	80.8	85.0	87.9	85.6	16.2	70.8	24.2	26.8
School level											
Elementary	64.3	61.3	80.9	83.1	89.1	88.9	87.3	14.8	71.3	21.1	22.0
Middle	56.9	47.0	79.6	78.0	83.3	87.6	85.5	16.4	69.1	25.6	29.1
Secondary	49.7	43.0	76.7	78.7	79.7	86.5	83.4	18.2	71.8	27.5	32.8
Combined/ungraded only	58.4	47.4	77.0	81.4	82.9	85.3	82.1	19.6	65.7	26.4	30.8
Middle school grade configuration											
Grades 6–8	57.2	46.0	80.8	78.3	83.8	87.3	86.1	16.3	70.7	26.0	28.8
Grades 7–8	56.2	45.0	78.7	78.5	80.4	88.3	85.6	16.9	67.1	25.8	29.6
Other middle	56.8	54.8	75.0	75.6	85.3	87.9	82.4	15.8	64.6	23.6	30.0
Secondary school grade configuration											
Grades 7–9	53.0	48.3	79.8	80.1	79.9	88.2	87.6	15.7	70.6	25.8	32.5
Other secondary	49.4	42.6	76.4	78.6	79.7	86.4	83.1	18.4	71.8	27.6	32.8

Table 27—Percentage of public school teachers who agreed[1] with various statements about their schools, by school level and grade configuration: 1993–94 and 1987–88[2]—Continued

School characteristics	Teachers participate in important educational decisions	I receive a great deal of parent support	Administration's behavior is supportive, encouraging	Principal enforces school rules, backs me up	I try to coordinate course content with other teachers	Teachers are evaluated fairly	Principal makes expectations for staff clear	Principal does poor job of getting resources	Paperwork, routine duties interfere with my teaching	Some school rules conflict with my professional judgment	Doing my best is sometimes a waste of time
						1987–88					
Total	56.1	58.4	78.6	83.1	86.1	84.2	85.9	17.3	73.8	27.2	30.1
School level											
Elementary	62.9	64.8	80.9	85.3	89.6	86.2	87.7	15.8	73.9	24.1	24.5
Middle	55.5	53.8	77.3	81.2	82.4	82.2	85.1	17.2	72.2	29.3	32.7
Secondary	47.2	51.0	76.6	81.3	82.4	82.6	84.5	19.1	74.6	30.8	37.2
Combined/ungraded only	55.8	59.6	77.0	81.1	85.6	82.5	82.3	19.4	69.9	27.5	30.5
Middle school grade configuration											
Grades 6–8	55.7	54.1	77.8	80.6	82.0	81.6	84.8	18.7	73.5	29.9	33.2
Grades 7–8	54.4	51.8	75.6	79.9	82.2	82.2	84.6	16.7	69.4	29.4	33.7
Other middle	56.4	56.0	78.1	84.7	84.2	83.6	86.8	13.2	72.2	27.6	29.8
Secondary school grade configuration											
Grades 7–9	50.6	53.2	79.1	82.7	80.3	85.7	86.3	18.4	74.5	29.9	36.3
Other secondary	46.8	50.7	76.3	81.1	82.7	82.2	84.2	19.2	74.6	30.9	37.3

[1]Teachers were included in this table if they said they "strongly agreed" or "somewhat agreed" with the statements. The other two response options were "somewhat disagreed" and "strongly disagreed."

[2]Only one of the column variables was included in the 1990–91 questionnaire, so data from that year are not shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88 and 1993–94.

Table 28—Percentage of public school teachers who were satisfied with particular aspects of their teaching job, by school level and grade configuration: 1994–95, 1991–92, and 1988–89

School characteristics	Overall job satisfaction	Teaching load	Availability of resources/ materials/ equipment	Recognition and support from administrators	Intellectual challenge	Influence over policy, practices	Caliber of colleagues	Professional prestige	Salary	Opportunity for advancement
					1994–95					
Total	80.6	59.8	58.6	61.6	86.6	52.6	85.0	55.2	58.7	67.6
School level										
Elementary	84.0	56.8	62.3	63.5	89.5	55.7	87.6	59.4	56.6	68.3
Middle	76.9	63.6	57.1	62.0	81.9	49.5	83.1	50.8	63.2	67.7
Secondary	78.2	63.7	55.4	59.6	84.1	51.0	81.0	53.2	61 3	67.1
Combined/ungraded only	79.9	55.8	50.8	63.8	74.2	59.5	90.3	52.4	50.4	49.4
Middle school grade configuration										
Grades 6–8	77.5	66.0	55.2	60.3	81.1	47.8	81.4	51.7	63.4	69.3
Grades 7–8	75.3	63.7	61.4	62.0	81.6	50.8	82.9	44.8	61.4	63.2
Other middle	76.9	54.8	58.2	68.6	84.9	53.9	89.7	56.1	64.9	68.4
Secondary school grade configuration										
Grades 7–9	79.4	43.2	50.2	45.4	91.3	37.7	92.4	57.0	51.5	64.5
Other secondary	78.1	64.8	55.7	60.4	83.7	51.7	80.4	53.0	61.8	67.3
					1991–92					
Total	80.1	57.3	59.9	58.5	85.6	50.3	86.2	53.3	60.0	63.9
School level										
Elementary	82.6	54.0	60.0	63.0	89.3	54.4	88.5	57.1	60.7	68.3
Middle	77.4	60.6	56.6	57.5	84.1	44.4	86.7	52.1	56.6	65.7
Secondary	77.6	61.9	63.6	51.8	80.7	46.2	82.5	48.5	59.6	58.3
Combined/ungraded only	75.3	59.1	61.1	57.0	82.3	56.6	87.2	54.4	61.5	54.0
Middle school grade configuration										
Grades 6–8	76.2	62.8	58.3	54.8	82.0	43.3	85.8	50.6	55.8	65.4
Grades 7–8	74.1	55.9	46.9	56.2	88.5	44.7	90.4	50.4	56.7	61.3
Other middle	87.6	58.9	64.6	70.3	85.7	48.4	84.9	61.1	59.5	73.7
Secondary school grade configuration										
Grades 7–9	83.9	63.4	58.9	49.4	74.9	41.1	84.0	37.0	52.2	54.2
Other secondary	76.9	61.7	64.0	52.0	81.2	46.7	82.3	49.6	60.4	58.7

Table 28—Percentage of public school teachers who were satisfied with particular aspects of their teaching job, by school level and grade configuration: 1994–95, 1991–92, and 1988–89—Continued

School characteristics	Overall job satisfaction	Teaching load	Availability of resources/ materials/ equipment	Recognition and support from administrators	Intellectual challenge	Influence over policy, practices	Caliber of colleagues	Professional prestige	Salary	Opportunity for advancement
					1988–89					
Total	(*)	61.8	61.6	57.2	80.4	47.5	83.6	(*)	55.7	(*)
School level										
Elementary	(*)	57.4	63.0	59.2	84.0	49.4	86.3	(*)	55.9	(*)
Middle	(*)	62.5	65.1	57.1	75.6	42.0	83.5	(*)	54.1	(*)
Secondary	(*)	65.4	59.1	51.5	78.5	45.6	79.8	(*)	54.3	(*)
Combined/ungraded only	(*)	77.8	53.2	70.5	73.7	47.2	79.2	(*)	66.4	(*)
Middle school grade configuration										
Grades 6–8	(*)	61.2	62.0	61.0	72.9	43.0	81.4	(*)	50.1	(*)
Grades 7–8	(*)	61.2	71.9	48.9	77.7	39.2	83.6	(*)	54.9	(*)
Other middle	(*)	71.9	63.1	58.7	84.0	43.9	93.2	(*)	71.6	(*)
Secondary school grade configuration										
Grades 7–9	(*)	65.6	64.1	50.7	69.4	44.8	98.9	(*)	58.4	(*)
Other secondary	(*)	65.4	58.6	51.6	79.4	45.7	78.1	(*)	54.0	(*)

*Data not collected for these variables in that year.

NOTE: Only teachers who taught at the same school as the previous year are included in this table (these "stayers" for 1994–95 constituted 86 percent of all 1993–94 public school teachers). Because teachers who stay at the same school tend to have higher job satisfaction levels than those who leave teaching (and perhaps also higher than those who change schools), these data are likely to be biased.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1988–89, 1991–92, and 1994–95.

Table 29—Percentage of public school teachers who rated various problems in their schools as serious, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Student apathy	Students arrive unprepared to learn	Lack of academic challenge	Absenteeism	Student disrespect for teachers	Poverty	Lack of parent involvement	Physical conflicts among students	Robbery or theft	Student alcohol use
					1993–94					
Total	23.6	28.8	6.5	14.4	18.5	19.5	27.6	8.2	4.1	9.2
School level										
Elementary	11.6	21.8	3.1	6.5	12.3	21.8	21.2	6.9	2.6	1.0
Middle	31.2	34.6	8.4	10.4	26.3	17.3	30.0	11.0	4.7	4.2
Secondary	38.2	35.8	10.5	28.5	23.5	15.6	34.9	8.5	5.8	25.0
Combined/ungraded only	28.9	30.9	9.8	15.0	20.3	26.8	35.5	8.1	3.6	14.2
Middle school grade configuration										
Grades 6–8	31.1	35.0	8.5	10.2	27.9	16.8	31.4	11.1	4.8	3.9
Grades 7–8	35.0	37.7	9.4	13.4	25.5	18.4	30.8	10.5	5.2	5.3
Other middle	26.4	28.2	6.7	6.8	20.6	18.0	22.5	11.6	3.6	4.3
Secondary school grade configuration										
Grades 7–9	31.6	34.9	9.0	14.2	28.5	15.7	30.6	12.0	5.3	7.9
Other secondary	38.8	35.8	10.6	29.7	23.0	15.6	35.3	8.2	5.9	26.3
					1990–91					
Total	(*)	(*)	(*)	14.1	(*)	(*)	(*)	6.5	3.4	8.2
School level										
Elementary	(*)	(*)	(*)	6.0	(*)	(*)	(*)	6.1	2.2	0.9
Middle	(*)	(*)	(*)	11.7	(*)	(*)	(*)	9.7	4.8	3.8
Secondary	(*)	(*)	(*)	27.7	(*)	(*)	(*)	5.4	4.4	20.9
Combined/ungraded only	(*)	(*)	(*)	13.1	(*)	(*)	(*)	7.6	3.8	13.9
Middle school grade configuration										
Grades 6–8	(*)	(*)	(*)	12.2	(*)	(*)	(*)	10.1	4.4	3.2
Grades 7–8	(*)	(*)	(*)	14.4	(*)	(*)	(*)	9.9	5.6	5.3
Other middle	(*)	(*)	(*)	5.3	(*)	(*)	(*)	7.4	5.3	3.8
Secondary school grade configuration										
Grades 7–9	(*)	(*)	(*)	17.7	(*)	(*)	(*)	7.8	4.4	7.4
Other secondary	(*)	(*)	(*)	28.7	(*)	(*)	(*)	5.2	4.4	22.2

Table 29—Percentage of public school teachers who rated various problems in their schools as serious, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Student apathy	Students arrive unprepared to learn	Lack of academic challenge	Absenteeism	Student disrespect for teachers	Poverty	Lack of parent involvement	Physical conflicts among students	Robbery or theft	Student alcohol use
					1987–88					
Total	(*)	(*)	(*)	16.4	(*)	(*)	(*)	5.8	3.7	11.4
School level										
Elementary	(*)	(*)	(*)	6.3	(*)	(*)	(*)	5.4	2.6	1.8
Middle	(*)	(*)	(*)	14.3	(*)	(*)	(*)	8.4	3.4	6.8
Secondary	(*)	(*)	(*)	31.0	(*)	(*)	(*)	5.2	5.2	26.8
Combined/ungraded only	(*)	(*)	(*)	16.4	(*)	(*)	(*)	4.5	3.5	14.8
Middle school grade configuration										
Grades 6–8	(*)	(*)	(*)	15.1	(*)	(*)	(*)	8.9	3.6	5.6
Grades 7–8	(*)	(*)	(*)	16.2	(*)	(*)	(*)	8.2	3.4	8.9
Other middle	(*)	(*)	(*)	9.1	(*)	(*)	(*)	7.4	2.8	6.9
Secondary school grade configuration										
Grades 7–9	(*)	(*)	(*)	18.0	(*)	(*)	(*)	6.8	4.0	11.9
Other secondary	(*)	(*)	(*)	32.6	(*)	(*)	(*)	5.0	5.3	28.6

*Data not collected for these variables in that year.

NOTE: The survey asked teachers to rate problems as serious, moderate, minor, or not a problem in their school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table 30—Percentage of public school principals who rated various problems in their schools as serious, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Student apathy	Students arrive unprepared to learn	Lack of academic challenge	Absenteeism	Student disrespect for teachers	Poverty	Lack of parent involvement	Physical conflicts among students	Robbery or theft	Student alcohol use
					1993–94					
Total	8.0	11.8	2.0	4.8	3.3	16.3	12.9	3.4	0.5	3.6
School level										
Elementary	4.1	11.7	0.9	2.1	2.2	17.4	9.3	3.0	0.4	0.2
Middle	12.7	11.2	3.0	3.9	5.1	14.8	15.1	5.0	0.4	1.2
Secondary	15.3	12.5	4.0	12.6	4.5	13.4	20.1	3.1	0.8	14.8
Combined/ungraded only	13.1	13.2	4.1	8.3	6.5	19.2	20.9	5.4	1.0	5.7
Middle school grade configuration										
Grades 6–8	14.7	12.7	3.3	4.2	6.2	16.4	16.9	6.5	0.5	0.8
Grades 7–8	10.8	12.2	3.7	4.6	3.8	12.8	16.4	3.1	0.6	3.1
Other middle	8.7	5.4	1.2	2.0	3.0	12.4	7.8	3.0	—	—
Secondary school grade configuration										
Grades 7–9	11.2	9.5	5.8	3.2	5.5	9.5	14.6	5.7	1.2	1.5
Other secondary	15.6	12.8	3.8	13.4	4.4	13.7	20.6	2.9	0.8	15.9
					1990–91					
Total	7.4	(*)	2.7	6.6	3.0	14.8	14.4	2.4	0.6	4.3
School level										
Elementary	3.8	(*)	1.8	3.3	2.5	15.9	11.4	2.0	0.6	0.7
Middle	10.5	(*)	4.3	6.2	5.0	11.7	16.5	3.9	0.5	1.8
Secondary	14.2	(*)	3.7	15.2	2.7	11.7	19.9	1.4	0.8	15.5
Combined/ungraded only	12.3	(*)	4.7	8.8	3.8	16.1	18.8	3.1	0.6	7.4
Middle school grade configuration										
Grades 6–8	11.2	(*)	3.9	6.8	4.9	11.2	16.3	3.3	0.4	0.7
Grades 7–8	11.4	(*)	6.8	8.3	6.8	10.8	20.1	3.3	0.9	4.1
Other middle	6.5	(*)	1.6	—	2.6	15.1	11.9	6.6	—	2.2
Secondary school grade configuration										
Grades 7–9	13.2	(*)	4.1	7.1	3.2	10.3	18.9	1.2	—	2.5
Other secondary	14.3	(*)	3.6	16.0	2.6	11.8	20.0	1.4	0.8	16.7

Table 30—Percentage of public school principals who rated various problems in their schools as serious, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Student apathy	Students arrive unprepared to learn	Lack of academic challenge	Absenteeism	Student disrespect for teachers	Poverty	Lack of parent involvement	Physical conflicts among students	Robbery or theft	Student alcohol use
					1987–88					
Total	(*)	(*)	(*)	7.0	(*)	(*)	(*)	2.4	0.7	3.6
School level										
Elementary	(*)	(*)	(*)	3.6	(*)	(*)	(*)	2.4	0.5	0.3
Middle	(*)	(*)	(*)	4.6	(*)	(*)	(*)	3.7	0.6	1.8
Secondary	(*)	(*)	(*)	16.6	(*)	(*)	(*)	1.2	0.7	12.9
Combined/ungraded only	(*)	(*)	(*)	10.3	(*)	(*)	(*)	2.8	1.3	7.1
Middle school grade configuration										
Grades 6–8	(*)	(*)	(*)	4.2	(*)	(*)	(*)	4.1	1.0	1.7
Grades 7–8	(*)	(*)	(*)	6.9	(*)	(*)	(*)	2.8	—	3.1
Other middle	(*)	(*)	(*)	2.6	(*)	(*)	(*)	4.2	—	—
Secondary school grade configuration										
Grades 7–9	(*)	(*)	(*)	8.7	(*)	(*)	(*)	2.3	0.9	2.1
Other secondary	(*)	(*)	(*)	17.6	(*)	(*)	(*)	1.1	0.7	14.4

—Too few sample observations for a reliable estimate.

*Data not collected for these variables in that year.

NOTE: The survey asked principals to rate problems as serious, moderate, minor, or not a problem in their school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Appendix B—Standard Error Tables

Table A1—Standard errors for table 1: Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94					
Total	182.7	384.7	395.4	186.3	158.9	335.2	143.6	193.1	60.6	183.1
School size										
Fewer than 150	332.5	267.9	138.4	122.7	46.6	66.8	85.9	86.2	24.6	119.8
150–499	513.1	429.7	239.7	169.3	150.7	183.4	83.2	141.2	29.1	162.5
500–749	445.3	419.8	235.8	112.0	29.0	188.1	64.7	117.4	43.1	108.0
750 or more	467.8	345.2	214.4	123.0	33.5	180.5	50.3	60.3	46.2	118.0
District size										
Fewer than 1,000	367.7	306.8	116.7	126.1	55.6	85.7	71.0	79.8	16.8	126.1
1,000–9,999	582.8	506.0	286.7	146.1	100.6	239.8	105.6	145.7	42.7	141.1
10,000 or more	442.4	369.3	206.8	96.5	109.6	191.3	53.5	99.5	38.2	99.8
Community type										
Central city	263.2	293.0	185.4	97.6	41.2	142.0	45.8	88.8	36.5	95.3
Urban fringe/large town	377.4	407.2	200.1	123.7	47.5	182.5	77.8	96.1	41.4	124.8
Rural/small town	310.0	319.2	264.8	165.6	155.6	219.9	103.1	141.8	40.7	157.9
Free/reduced-price lunch recipients										
Less than 20 percent	561.3	510.7	229.4	187.9	54.9	187.2	64.7	116.4	42.6	181.4
20 percent or more	557.8	567.3	270.1	186.3	151.2	231.4	108.5	131.9	51.6	188.4
Minority enrollment										
Less than 20 percent	481.4	433.2	351.2	155.6	63.4	269.9	103.9	154.5	50.1	149.7
20 percent or more	477.8	433.5	288.6	175.8	154.9	256.7	91.7	122.9	50.2	179.7
Minority teachers										
Less than 20 percent	391.0	434.8	364.9	190.9	130.2	302.6	125.6	204.3	53.8	186.1
20 percent or more	359.9	316.0	182.8	121.8	108.2	167.7	51.4	44.0	26.7	121.8

Table A1—Standard errors for table 1: Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Total, all levels	School level: Elementary	Middle	Secondary	Combined/ ungraded only	Grade configurations of middle schools: Grades 6–8	Grades 7–8	Other middle	Grade configurations of secondary schools: Grades 7–9	Other secondary
1993–94—Contined										
Principal										
Male	625.6	533.6	392.1	180.0	161.7	305.2	123.7	178.6	59.6	185.6
Female	548.4	546.8	205.2	110.4	42.7	164.7	70.7	74.0	34.6	114.5
Principal										
Minority	392.7	356.4	160.1	105.7	28.1	146.5	45.5	61.4	26.6	98.8
White, non-Hispanic	556.9	552.4	395.8	195.7	157.0	317.7	131.8	180.3	54.6	196.9
Region										
Northeast	73.3	178.1	177.1	45.4	18.8	172.3	37.2	111.9	31.9	50.1
South	106.6	212.4	196.1	91.7	57.0	161.5	77.1	121.8	28.8	87.4
Midwest	99.1	220.9	234.1	121.6	107.9	174.8	79.9	121.1	45.4	125.0
West	80.2	216.9	182.9	75.6	117.2	166.6	77.6	70.9	33.3	88.5
1990–91										
Total	197.3	373.3	344.8	200.9	163.5	258.5	130.6	163.9	117.4	197.1
School size										
Fewer than 150	364.0	294.4	134.9	174.0	86.6	86.4	98.7	21.9	30.6	168.0
150–499	575.3	500.0	194.2	208.6	145.1	158.4	96.4	126.0	48.3	192.0
500–749	466.2	428.8	207.3	125.0	53.8	167.2	70.1	96.7	52.1	115.9
750 or more	304.4	243.2	192.2	205.3	54.2	163.9	59.4	55.9	77.3	210.0
District size										
Fewer than 1,000	351.0	315.3	155.1	118.3	63.8	108.0	70.4	44.3	27.9	118.0
1,000–9,999	520.2	506.7	284.4	189.0	113.3	196.7	124.0	145.7	64.6	181.6
10,000 or more	499.8	408.7	214.4	122.8	76.7	214.0	67.8	46.0	74.1	119.4

Table A1—Standard errors for table 1: Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1990–91—Continued					
Community type										
Central city	266.8	294.7	190.2	113.0	55.7	151.7	80.0	58.7	70.8	117.3
Urban fringe/large town	330.2	304.1	189.4	113.0	64.7	161.4	91.7	79.0	60.6	112.3
Rural/small town	255.8	322.1	272.2	141.9	155.6	180.8	109.1	137.9	60.3	134.1
Free/reduced-price lunch recipients										
Less than 20 percent	527.7	460.0	208.9	182.3	93.9	175.6	89.0	100.6	58.6	199.0
20 percent or more	514.9	561.8	264.7	218.3	135.3	227.2	104.7	149.3	89.6	197.2
Minority enrollment										
Less than 20 percent	433.2	488.2	255.2	173.1	124.3	172.4	120.7	125.0	80.0	175.8
20 percent or more	408.8	422.3	251.0	170.2	85.0	222.0	88.3	100.4	78.3	161.3
Minority teachers										
Less than 20 percent	438.7	468.6	316.7	204.3	155.0	219.2	109.8	158.4	103.6	207.6
20 percent or more	372.4	313.1	189.0	120.1	76.6	149.2	78.8	67.7	54.6	110.0
Principal										
Male	536.7	435.1	314.1	228.4	150.7	222.2	124.1	150.9	113.6	246.0
Female	572.1	520.9	144.6	128.2	95.0	134.0	85.8	60.2	33.9	120.3
Principal										
Minority	389.4	344.0	162.0	99.6	55.3	136.0	63.9	61.1	39.4	86.9
White, non-Hispanic	423.4	510.7	324.0	198.2	156.6	240.3	123.0	159.4	109.0	210.0
Region										
Northeast	52.7	161.2	158.0	104.2	64.9	115.9	75.9	68.3	50.1	96.0
South	130.4	242.6	216.1	103.0	98.0	176.2	98.0	92.0	34.0	109.4
Midwest	99.9	207.7	217.2	100.6	94.8	183.0	56.3	96.8	46.3	102.9
West	68.8	112.2	136.1	84.7	90.0	118.4	65.9	78.7	49.9	87.2

Table A1—Standard errors for table 1: Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88					
Total	321.3	446.3	307.9	185.7	161.9	257.2	147.5	109.3	107.6	184.2
School size										
Fewer than 150	353.4	306.9	85.5	147.6	114.1	59.0	40.9	45.4	30.8	141.8
150–499	535.9	477.5	241.3	159.8	96.7	175.5	118.2	107.1	75.9	157.0
500–749	462.8	329.2	179.0	153.9	61.7	141.2	81.3	62.2	64.2	124.8
750 or more	260.8	172.8	102.1	150.7	48.8	82.0	51.6	50.0	73.0	145.7
District size										
Fewer than 1,000	351.9	312.3	111.0	134.2	106.0	74.3	33.9	52.7	38.2	139.3
1,000–9,999	505.8	451.4	246.7	188.9	72.0	192.3	119.2	92.7	73.7	194.7
10,000 or more	270.6	285.3	138.6	129.9	60.7	120.6	79.0	49.3	86.2	107.3
Community type										
Central city	233.3	243.6	109.2	116.1	64.9	82.3	64.0	41.5	63.9	108.4
Urban fringe/large town	401.3	405.9	204.0	135.9	51.8	141.7	112.7	65.2	63.3	120.7
Rural/small town	503.5	413.6	220.0	169.7	120.2	162.1	96.0	115.1	59.0	174.7
Free/reduced-price lunch recipients										
Less than 20 percent	431.8	406.8	237.7	152.1	79.3	190.0	104.8	83.1	90.6	154.1
20 percent or more	337.3	347.5	221.1	203.0	132.2	162.6	98.5	114.7	90.0	172.0
Minority enrollment										
Less than 20 percent	367.9	408.5	256.4	164.8	145.8	213.6	95.9	98.7	71.2	137.0
20 percent or more	306.3	313.5	172.4	132.8	88.9	129.9	95.6	86.1	81.1	138.1
Minority teachers										
Less than 20 percent	407.4	485.3	303.2	145.9	134.6	252.0	129.1	93.8	99.0	145.4
20 percent or more	336.6	294.9	111.4	113.0	77.3	91.1	55.4	64.0	64.8	102.0

Table A1—Standard errors for table 1: Number of public schools in each school level and number of middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88—Continued					
Principal										
Male	472.6	534.0	275.4	183.3	130.3	238.7	130.0	95.6	90.4	178.1
Female	358.0	354.0	114.3	98.0	62.9	100.1	60.0	49.8	41.2	91.3
Principal										
Minority	227.3	193.7	114.8	101.8	70.6	75.1	64.3	45.3	49.8	92.3
White, non-Hispanic	431.0	490.9	320.3	155.0	123.1	263.8	132.8	103.7	92.0	169.4
Region										
Northeast	135.0	172.0	110.6	57.3	46.0	82.7	47.4	53.6	39.9	62.0
South	189.8	220.0	146.0	112.0	94.3	114.0	62.6	103.7	56.6	114.6
Midwest	155.6	235.7	163.6	119.7	76.8	138.1	64.3	89.8	53.4	114.7
West	141.9	170.9	153.0	95.1	63.2	118.0	83.9	46.0	65.1	86.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A2—Standard errors for table 2: Percentage distributions of public schools according to school level and grade configuration, by selected school characteristics: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	All school levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
1993–94										
Total	0	0.48	0.48	0.23	0.20	1.65	1.11	1.56	0.35	0.35
Community type										
Central city	0	1.10	0.95	0.51	0.21	2.87	2.03	3.22	1.19	1.19
Urban fringe/large town	0	1.12	0.90	0.62	0.23	3.31	2.28	2.61	1.05	1.05
Rural/small town	0	0.67	0.63	0.41	0.40	2.37	1.62	2.27	0.38	0.38
District size										
Fewer than 1,000	0	1.21	0.84	0.91	0.45	5.15	4.62	5.56	0.41	0.41
1,000–9,999	0	0.81	0.74	0.49	0.29	2.66	1.55	2.35	0.54	0.54
10,000 or more	0	0.94	0.74	0.41	0.42	2.92	1.49	2.65	0.96	0.96
Region										
Northeast	0	1.28	1.28	0.36	0.14	5.93	2.20	5.48	1.17	1.17
Midwest	0	0.84	0.82	0.40	0.24	3.42	1.85	3.30	0.52	0.52
South	0	0.87	0.87	0.43	0.41	2.61	1.73	2.48	0.81	0.81
West	0	1.27	1.07	0.43	0.69	4.13	3.89	3.10	1.03	1.03
1990–91										
Total	0	0.43	0.43	0.21	0.20	1.72	1.20	1.39	0.66	0.66
Community type										
Central city	0	1.01	1.02	0.58	0.30	2.94	3.09	2.47	2.22	2.22
Urban fringe/large town	0	0.93	0.81	0.61	0.30	3.78	3.30	2.61	1.49	1.49
Rural/small town	0	0.63	0.68	0.36	0.38	2.61	1.97	2.34	0.58	0.58
District size										
Fewer than 1,000	0	1.40	1.11	0.91	0.60	6.90	5.74	4.61	0.73	0.73
1,000–9,999	0	0.79	0.60	0.55	0.30	2.45	1.94	2.15	0.83	0.83
10,000 or more	0	0.90	0.76	0.59	0.30	2.84	2.62	1.45	1.52	1.52
Region										
Northeast	0	1.11	1.21	0.74	0.47	4.68	4.27	4.03	1.78	1.78
Midwest	0	0.93	0.91	0.41	0.42	3.80	3.14	2.81	0.65	0.65
South	0	0.80	0.82	0.39	0.37	2.74	1.67	2.40	0.81	0.81
West	0	0.71	0.81	0.52	0.55	4.51	3.39	4.04	1.44	1.44

Table A2—Standard errors for table 2: Percentage distributions of public schools according to school level and grade configuration, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	All school levels	School level: Elementary	Middle	Secondary	Combined/ ungraded only	Grade configurations of middle schools: Grades 6–8	Grades 7–8	Other middle	Grade configurations of secondary schools: Grades 7–9	Other secondary
					1987–88					
Total	0	0.45	0.40	0.23	0.21	1.60	1.56	1.20	0.61	0.61
Community type										
Central city	0	0.76	0.58	0.58	0.33	2.81	2.53	1.92	1.71	1.71
Urban fringe/large town	0	1.08	0.96	0.68	0.26	3.37	3.23	2.08	1.28	1.28
Rural/small town	0	0.67	0.55	0.43	0.31	2.48	2.39	2.17	0.65	0.65
District size										
Fewer than 1,000	0	1.48	0.87	1.20	0.89	7.79	5.76	6.53	1.22	1.22
1,000–9,999	0	0.79	0.67	0.54	0.21	2.56	2.21	1.82	0.96	0.96
10,000 or more	0	0.81	0.63	0.55	0.27	3.05	2.57	1.97	1.71	1.71
Region										
Northeast	0	0.91	0.81	0.40	0.34	3.66	2.96	3.25	1.37	1.37
Midwest	0	0.67	0.65	0.50	0.42	3.31	2.30	3.46	1.13	1.13
South	0	0.78	0.63	0.45	0.30	2.74	1.99	2.52	0.86	0.86
West	0	0.94	0.94	0.62	0.39	4.64	4.37	2.40	1.88	1.88

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A3—Standard errors for table 3: Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94					
Total	393,745.6	323,697.4	263,020.9	189,603.7	51,122.5	229,545.1	71,492.5	83,644.4	50,801.0	190,824.0
School size										
Fewer than 150	33,319.8	26,855.2	10,319.1	11,058.0	3,133.2	6,981.7	7,707.1	1,433.7	2,977.8	10,846.5
150–499	174,793.4	144,103.0	82,714.1	49,997.6	39,524.4	66,135.0	30,513.2	43,683.5	9,489.4	49,097.3
500–749	272,877.0	257,260.8	151,040.9	70,982.8	18,028.9	120,930.9	40,458.8	75,001.6	27,731.0	66,926.6
750 or more	486,847.3	324,861.4	215,258.0	178,985.5	33,341.0	176,103.0	51,520.9	62,524.6	47,261.5	181,798.0
District size										
Fewer than 1,000	110,650.9	94,735.7	22,249.8	37,980.6	29,822.2	15,572.7	6,551.0	19,859.3	2,823.2	38,142.4
1,000–9,999	347,999.8	277,110.5	173,317.8	136,241.2	25,919.0	144,329.8	54,109.3	81,325.2	34,812.5	129,605.9
10,000 or more	362,365.7	235,205.8	190,987.8	133,680.5	31,659.0	166,136.7	39,581.4	57,799.0	37,196.7	137,553.8
Community type										
Central city	277,568.5	217,369.0	151,988.9	131,430.5	13,171.0	123,440.8	34,574.3	46,385.4	31,836.9	131,194.0
Urban fringe/large town	325,939.1	272,322.9	150,660.8	155,010.3	32,103.3	138,213.0	51,318.0	47,092.2	39,500.7	150,098.4
Rural/small town	216,669.5	200,062.5	136,369.9	127,437.5	39,786.1	116,496.4	42,035.1	67,996.7	24,778.7	119,168.5
Free/reduced-price lunch recipients										
Less than 20 percent	350,727.3	277,923.6	150,220.0	171,673.3	33,907.3	126,920.6	34,772.5	62,759.6	33,806.3	167,120.8
20 percent or more	362,298.8	355,190.3	188,019.3	126,354.0	37,029.1	154,774.5	59,038.6	55,348.3	40,888.6	128,265.8
Minority enrollment										
Less than 20 percent	303,106.5	242,889.9	199,269.2	125,642.3	26,627.4	165,713.3	40,031.8	72,655.8	38,109.5	123,111.9
20 percent or more	373,284.4	266,932.5	210,334.5	170,845.0	49,887.0	186,933.8	55,529.4	57,876.1	44,898.6	174,104.0
Minority teachers										
Less than 20 percent	346,272.5	291,629.3	220,187.5	158,161.3	40,756.5	199,550.0	53,552.2	84,468.8	42,030.3	157,257.5
20 percent or more	280,603.0	179,958.6	156,683.2	116,499.7	35,731.5	140,679.7	36,476.7	44,181.3	29,395.1	117,969.8

Table A3—Standard errors for table 3: Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94—Continued					
Principal										
Male	430,050.5	302,081.6	235,227.0	185,320.7	52,244.9	194,036.9	61,987.5	77,218.6	45,320.3	188,300.3
Female	309,338.4	295,956.5	149,077.0	92,049.5	11,075.0	132,807.0	45,553.2	41,736.2	30,991.0	94,546.6
Principal										
Minority	263,602.0	192,941.0	137,013.0	105,734.2	10,175.7	124,753.1	38,958.7	39,950.7	26,335.5	102,686.9
White, non-Hispanic	433,907.1	364,147.1	244,364.0	182,975.9	47,519.1	206,869.5	62,466.9	84,227.0	43,616.2	184,221.2
Region										
Northeast	158,610.0	129,411.8	115,230.4	76,193.7	19,482.9	118,061.4	22,072.7	65,105.0	22,690.1	75,557.6
South	124,722.4	115,986.4	91,531.4	77,803.6	29,055.3	80,935.2	29,399.7	48,027.5	21,438.9	76,387.8
Midwest	206,018.2	144,956.4	158,316.7	134,311.8	25,367.4	126,289.7	46,392.5	53,793.9	31,349.1	129,041.6
West	186,931.0	188,457.8	146,091.0	120,094.8	32,461.0	132,619.4	43,765.0	44,491.4	34,295.4	120,711.1
					1990–91					
Total	362,552.6	233,914.7	232,230.8	293,078.0	83,210.1	196,775.3	65,926.5	88,617.1	100,213.1	308,946.7
School size										
Fewer than 150	32,396.7	28,515.3	11,981.4	15,676.6	7,100.5	7,602.7	8,909.3	2,003.4	2,360.3	15,875.7
150–499	227,211.1	194,009.7	69,363.6	72,811.7	52,043.0	59,716.0	33,015.6	40,864.6	18,679.1	64,908.9
500–749	288,123.3	257,936.0	127,756.7	79,490.1	33,452.9	103,659.9	42,379.7	58,313.0	32,372.0	73,177.8
750 or more	359,836.8	221,741.6	195,488.6	309,214.0	61,085.7	172,691.4	51,074.5	48,074.4	85,396.0	318,030.6
District size										
Fewer than 1,000	108,699.1	98,979.9	25,686.0	29,780.7	33,599.0	16,375.4	8,970.7	11,635.4	3,766.0	29,145.9
1,000–9,999	342,614.2	280,504.5	152,985.6	162,364.6	53,445.8	111,184.8	58,574.0	83,167.5	41,348.4	169,832.7
10,000 or more	380,297.7	217,429.6	191,608.6	208,988.7	40,995.4	184,233.7	49,854.3	33,327.3	76,333.0	211,502.5

Table A3—Standard errors for table 3: Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
1990–91—Continued										
Community type										
Central city	243,139.1	168,102.3	154,389.5	151,429.0	30,320.7	127,022.7	52,447.1	32,325.2	73,994.9	166,167.8
Urban fringe/large town	216,690.5	165,045.1	138,597.6	146,646.4	32,870.8	118,507.6	40,764.6	53,962.2	51,775.3	141,496.3
Rural/small town	189,642.5	143,829.8	125,615.4	135,321.5	70,557.8	82,150.1	46,658.7	57,763.3	36,530.8	133,948.5
Free/reduced-price lunch recipients										
Less than 20 percent	316,655.8	195,810.8	124,706.1	214,111.2	44,940.3	116,269.5	52,310.9	56,159.8	47,440.2	227,262.9
20 percent or more	317,679.9	302,886.3	190,402.3	182,137.2	64,641.9	166,504.9	57,227.6	67,641.2	77,519.6	176,340.4
Minority enrollment										
Less than 20 percent	287,570.2	224,895.9	132,688.6	164,669.4	54,509.4	111,095.4	46,726.9	66,920.9	52,265.3	180,950.2
20 percent or more	326,750.7	237,644.1	187,067.9	239,469.8	44,196.1	169,997.9	57,932.0	51,188.5	78,330.1	246,290.9
Minority teachers										
Less than 20 percent	353,038.0	228,795.0	189,412.4	262,976.3	73,690.4	146,246.4	60,871.1	79,431.0	79,627.0	275,115.1
20 percent or more	259,203.5	199,876.4	124,051.4	139,818.7	33,962.1	113,690.3	35,718.1	38,154.9	60,228.5	134,823.2
Principal										
Male	408,255.3	259,174.7	181,111.3	283,175.7	81,312.5	151,339.8	63,998.8	79,809.5	98,087.8	287,247.6
Female	294,626.7	246,512.2	114,647.3	104,319.1	29,565.7	109,048.4	31,368.8	29,135.6	43,252.5	99,388.7
Principal										
Minority	246,509.4	192,024.6	114,518.5	96,269.1	21,945.6	99,657.0	45,179.0	33,272.9	31,790.9	87,781.6
White, non-Hispanic	365,618.3	276,704.5	197,441.4	261,943.0	75,832.4	173,053.8	58,618.0	78,328.1	88,573.9	268,574.1
Region										
Northeast	132,348.0	92,053.5	85,097.4	112,052.3	39,149.7	73,168.1	30,840.2	43,552.0	37,689.2	107,507.7
South	134,317.4	110,033.4	96,320.8	91,155.6	30,434.2	82,860.8	36,371.2	48,589.2	26,105.6	98,986.9
Midwest	169,690.7	138,824.3	158,717.9	138,431.6	58,110.3	143,801.3	33,341.0	48,554.0	38,113.2	139,945.8
West	201,123.5	89,185.9	107,726.4	171,458.2	25,439.8	94,482.3	47,931.0	20,710.0	59,083.0	166,585.7

Table A3—Standard errors for table 3: Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88					
Total	165,010.9	201,825.1	155,043.4	143,312.2	62,259.8	138,405.1	76,121.1	41,202.4	78,050.1	163,587.2
School size										
Fewer than 150	34,661.3	29,619.3	8,899.0	13,896.8	10,071.6	5,781.3	4,102.9	5,092.1	2,609.6	14,038.1
150–499	196,967.8	182,028.4	84,112.8	50,738.9	28,026.5	62,237.6	37,804.2	37,326.1	27,692.5	47,349.9
500–749	278,476.0	201,592.8	108,591.0	97,301.4	37,903.0	86,253.3	48,955.3	36,720.4	40,391.3	77,684.1
750 or more	272,513.3	150,128.2	98,561.0	182,212.4	89,669.4	77,287.7	47,322.8	45,642.3	74,035.7	186,801.5
District size										
Fewer than 1,000	94,666.8	84,526.2	18,074.9	45,308.7	26,265.1	11,591.5	3,395.9	11,617.9	6,487.1	45,660.3
1,000–9,999	202,146.5	152,331.6	120,602.4	128,017.6	81,965.6	100,706.3	49,730.2	43,200.4	44,748.8	127,699.6
10,000 or more	179,052.7	154,848.0	102,586.8	143,612.6	35,710.4	89,293.4	56,283.6	34,660.9	63,948.7	131,810.8
Community type										
Central city	171,303.8	127,580.2	75,581.2	132,177.4	35,501.7	60,517.7	43,379.6	26,331.2	50,296.7	127,067.9
Urban fringe/large town	258,694.6	227,617.4	128,114.4	116,271.8	33,396.1	99,677.7	60,181.2	42,271.8	46,888.0	111,578.8
Rural/small town	174,116.6	107,600.1	94,351.8	111,967.2	66,692.8	70,830.6	37,890.3	46,922.5	28,605.6	122,394.7
Free/reduced-price lunch recipients										
Less than 20 percent	237,571.8	190,384.6	113,722.1	158,302.9	77,638.6	103,864.1	50,257.2	36,800.9	61,344.5	174,276.5
20 percent or more	220,701.2	166,059.2	127,562.7	130,917.7	53,704.3	100,779.7	54,073.6	49,937.5	64,562.4	112,924.0
Minority enrollment										
Less than 20 percent	193,320.4	172,930.1	113,156.6	118,414.8	90,896.4	107,324.2	36,841.2	39,354.7	47,374.9	122,321.3
20 percent or more	192,106.7	144,578.9	109,640.0	134,023.3	46,010.1	84,075.7	59,955.1	40,004.3	65,918.2	145,744.6
Minority teachers										
Less than 20 percent	222,894.7	216,683.1	163,040.1	103,895.7	88,746.3	142,806.3	61,417.5	44,038.3	70,248.5	119,265.7
20 percent or more	165,620.2	107,802.1	84,440.2	111,960.0	38,229.9	74,908.1	36,292.3	33,970.6	51,507.5	113,554.9

Table A3—Standard errors for table 3: Number of public school students in each school level and in middle and secondary schools with particular grade configurations, by selected school characteristics: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88—Continued					
Principal										
Male	219,513.5	207,322.3	142,995.8	143,232.0	89,084.6	126,168.5	66,923.1	34,737.9	71,929.6	152,221.0
Female	215,152.4	181,208.6	68,795.5	121,230.8	30,531.2	61,581.1	41,978.4	24,402.5	31,333.4	113,614.5
Principal										
Minority	148,235.2	115,216.4	80,531.7	100,209.8	27,949.8	60,096.4	41,633.9	23,064.8	38,764.6	95,790.0
White, non-Hispanic	189,003.2	205,560.5	150,254.2	114,123.9	91,903.5	141,301.6	58,619.4	37,561.0	79,903.4	141,839.2
Region										
Northeast	70,987.4	76,850.6	56,498.0	55,972.3	38,125.2	43,761.5	22,256.3	31,988.1	30,599.5	59,104.7
Midwest	103,872.8	77,202.4	66,651.9	81,090.2	56,700.8	59,642.5	29,836.8	34,426.8	30,164.0	92,329.1
South	99,884.2	132,364.8	96,534.8	93,642.8	37,717.5	93,544.4	34,458.3	39,633.1	37,930.7	96,433.1
West	82,700.3	70,667.7	90,946.1	81,646.7	21,372.9	70,375.3	52,139.0	25,590.4	54,731.6	80,095.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A4—Standard errors for table 4: Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88

School characteristics	Total, all levels	School level: Elementary	School level: Middle	School level: Secondary	School level: Combined/ ungraded only	Grade configurations of middle schools: Grades 6–8	Grade configurations of middle schools: Grades 7–8	Grade configurations of middle schools: Other middle	Grade configurations of secondary schools: Grades 7–9	Grade configurations of secondary schools: Other secondary
1993–94										
Total	0	0	0	0	0	0	0	0	0	0
School size										
Fewer than 150	0.41	0.60	1.11	0.75	2.14	0.90	2.71	3.69	1.91	0.77
150–499	0.64	0.81	1.82	0.81	2.97	2.24	2.55	5.24	2.34	0.84
500–749	0.60	0.80	1.62	0.62	1.04	2.14	2.35	4.60	2.93	0.64
750 or more	0.57	0.71	1.63	0.67	1.12	2.20	1.67	3.18	2.96	0.70
District size										
Fewer than 1,000	0.49	0.67	1.00	0.71	2.13	1.23	2.48	3.90	1.46	0.79
1,000–9,999	0.74	1.02	1.64	0.74	2.61	2.51	2.99	4.53	2.82	0.78
10,000 or more	0.57	0.81	1.70	0.61	2.92	2.58	2.42	4.44	2.59	0.59
Community type										
Central city	0.32	0.61	1.41	0.57	1.71	1.80	1.64	3.81	2.58	0.59
Urban fringe/large town	0.46	0.80	1.38	0.67	1.62	2.00	2.40	3.77	2.64	0.72
Rural/small town	0.37	0.58	1.50	0.65	2.28	2.31	2.31	4.38	3.01	0.70
Free/reduced-price lunch recipients										
Less than 20 percent	0.73	1.00	1.60	0.98	1.99	2.18	2.14	4.22	2.96	1.01
20 percent or more	0.73	1.00	1.60	0.98	1.99	2.18	2.14	4.22	2.96	1.01
Minority enrollment										
Less than 20 percent	0.58	0.80	2.21	0.82	2.59	2.97	2.47	4.52	3.24	0.90
20 percent or more	0.58	0.80	2.21	0.82	2.59	2.97	2.47	4.52	3.24	0.90
Minority teachers										
Less than 20 percent	0.44	0.63	1.44	0.68	2.93	2.20	1.64	2.57	1.87	0.73
20 percent or more	0.44	0.63	1.44	0.68	2.93	2.20	1.64	2.57	1.87	0.73

Table A4—Standard errors for table 4: Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94—Continued					
Principal										
Male	0.71	1.07	1.69	0.62	1.81	2.25	2.41	3.57	2.62	0.70
Female	0.71	1.07	1.69	0.62	1.81	2.25	2.41	3.57	2.62	0.70
Principal										
Minority	0.52	0.78	1.36	0.62	1.00	2.12	1.67	2.81	1.97	0.62
White, non-Hispanic	0.52	0.78	1.36	0.62	1.00	2.12	1.67	2.81	1.97	0.62
Region										
Northeast	0.08	0.34	1.31	0.32	0.92	2.34	1.34	4.74	2.44	0.36
Midwest	0.11	0.38	1.42	0.44	1.85	1.89	2.37	4.97	2.09	0.49
South	0.09	0.41	1.79	0.46	2.84	2.28	2.29	4.24	3.06	0.53
West	0.10	0.38	1.37	0.40	3.00	2.00	2.61	3.37	2.28	0.51
					1990–91					
Total	0	0	0	0	0	0	0	0	0	0
School size										
Fewer than 150	0.40	0.59	1.21	1.01	2.11	1.49	3.59	1.32	2.02	1.09
150–499	0.69	0.89	1.98	1.20	2.40	2.55	3.24	5.86	2.77	1.21
500–749	0.59	0.90	1.69	0.71	1.28	2.43	2.73	4.89	2.62	0.72
750 or more	0.38	0.49	1.74	1.11	1.29	2.44	2.40	3.07	3.64	1.21
District size										
Fewer than 1,000	0.41	0.67	1.60	0.71	1.45	1.94	2.81	2.78	1.89	0.81
1,000–9,999	0.72	1.00	2.21	0.99	2.11	3.43	3.38	3.35	3.34	1.05
10,000 or more	0.63	0.87	2.18	0.62	1.92	3.22	3.00	2.69	3.37	0.64

Table A4—Standard errors for table 4: Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Total, all levels	School level: Elementary	Middle	Secondary	Combined/ ungraded only	Grade configurations of middle schools: Grades 6–8	Grades 7–8	Other middle	Grade configurations of secondary schools: Grades 7–9	Other secondary
1990–91—Continued										
Community type										
Central city	0.35	0.59	1.84	0.59	1.40	2.32	3.00	3.43	3.61	0.67
Urban fringe/large town	0.39	0.59	1.53	0.57	1.60	2.16	3.20	4.34	3.13	0.59
Rural/small town	0.29	0.52	2.18	0.60	1.95	2.94	3.60	5.76	3.41	0.80
Free/reduced-price lunch recipients										
Less than 20 percent	0.60	0.98	1.66	1.02	2.11	2.71	3.13	5.46	3.04	1.09
20 percent or more	0.60	0.98	1.66	1.02	2.11	2.71	3.13	5.46	3.04	1.09
Minority enrollment										
Less than 20 percent	0.51	0.85	1.87	0.82	1.61	2.63	3.34	4.72	3.39	0.88
20 percent or more	0.51	0.85	1.87	0.82	1.61	2.63	3.34	4.72	3.39	0.88
Minority teachers										
Less than 20 percent	0.47	0.60	1.81	0.67	1.81	2.20	2.73	4.25	3.19	0.70
20 percent or more	0.47	0.60	1.81	0.67	1.81	2.20	2.73	4.25	3.19	0.70
Principal										
Male	0.70	1.00	1.34	0.76	2.16	2.00	3.24	3.39	2.22	0.82
Female	0.70	1.00	1.34	0.76	2.16	2.00	3.24	3.39	2.22	0.82
Principal										
Minority	0.49	0.73	1.60	0.57	1.30	2.19	2.43	3.83	2.51	0.57
White, non-Hispanic	0.49	0.73	1.60	0.57	1.30	2.19	2.43	3.83	2.51	0.57
Region										
Northeast	0.07	0.29	1.49	0.52	1.39	1.99	2.70	4.23	2.54	0.53
Midwest	0.11	0.39	1.87	0.53	2.20	2.88	3.28	4.57	2.26	0.60
South	0.10	0.36	1.81	0.54	1.99	2.63	2.02	4.69	2.79	0.55
West	0.08	0.24	1.29	0.42	1.98	1.76	2.69	4.39	2.21	0.50

Table A4—Standard errors for table 4: Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Total, all levels	School level: Elementary	Middle	Secondary	Combined/ ungraded only	Grade configurations of middle schools: Grades 6–8	Grades 7–8	Other middle	Grade configurations of secondary schools: Grades 7–9	Other secondary
1987–88										
Total	0	0	0	0	0	0	0	0	0	0
School size										
Fewer than 150	0.42	0.60	0.89	0.83	1.79	1.19	1.55	2.27	1.51	0.91
150–499	0.61	0.80	1.66	0.93	1.76	2.49	3.33	3.34	3.24	1.04
500–749	0.63	0.74	1.93	0.87	1.29	2.86	3.27	3.06	3.15	0.82
750 or more	0.34	0.35	1.13	0.92	1.08	1.60	1.74	3.20	3.22	0.93
District size										
Fewer than 1,000	0.48	0.70	1.27	0.83	1.53	1.66	1.46	2.71	2.09	1.00
1,000–9,999	0.62	0.94	1.58	1.03	1.72	2.68	3.14	3.28	3.55	1.07
10,000 or more	0.38	0.57	1.66	0.81	1.14	2.78	3.22	2.90	3.76	0.83
Community type										
Central city	0.30	0.49	1.28	0.67	1.28	1.92	2.51	2.21	2.54	0.69
Urban fringe/large town	0.52	0.78	1.78	0.73	0.94	2.13	3.30	3.52	2.54	0.78
Rural/small town	0.56	0.75	1.80	0.83	1.34	2.34	3.14	3.69	2.50	0.91
Free/reduced-price lunch recipients										
Less than 20 percent	0.48	0.67	1.96	1.02	1.70	2.81	2.88	4.26	3.67	1.02
20 percent or more	0.48	0.67	1.96	1.02	1.70	2.81	2.88	4.26	3.67	1.02
Minority enrollment										
Less than 20 percent	0.37	0.58	1.62	0.68	1.78	2.50	2.44	3.81	2.77	0.71
20 percent or more	0.37	0.58	1.62	0.68	1.78	2.50	2.44	3.81	2.77	0.71
Minority teachers										
Less than 20 percent	0.42	0.61	1.30	0.57	1.41	2.09	1.89	2.91	2.95	0.58
20 percent or more	0.42	0.61	1.30	0.57	1.41	2.09	1.89	2.91	2.95	0.58

Table A4—Standard errors for table 4: Percentage distributions of public schools according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Total, all levels	School level: Elementary	Middle	Secondary	Combined/ ungraded only	Grade configurations of middle schools: Grades 6–8	Grades 7–8	Other middle	Grade configurations of secondary schools: Grades 7–9	Other secondary
1987–88—Continued										
Principal										
Male	0.47	0.79	1.17	0.59	1.24	2.05	2.12	2.34	1.87	0.63
Female	0.47	0.79	1.17	0.59	1.24	2.05	2.12	2.34	1.87	0.63
Principal										
Minority	0.31	0.45	1.37	0.58	1.42	1.86	2.36	2.27	2.26	0.62
White, non-Hispanic	0.31	0.45	1.37	0.58	1.42	1.86	2.36	2.27	2.26	0.62
Region										
Northeast	0.15	0.31	1.07	0.37	0.95	1.43	1.79	2.91	2.01	0.39
Midwest	0.20	0.38	1.17	0.57	1.51	1.79	2.10	4.65	2.54	0.70
South	0.17	0.42	1.64	0.52	1.42	2.48	2.04	4.12	2.36	0.59
West	0.16	0.27	1.46	0.52	1.12	2.33	2.42	2.39	2.60	0.51

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A5—Standard errors for table 5: Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94					
Total	0	0	0	0	0	0	0	0	0	0
School size										
Fewer than 150	0.09	0.14	0.20	0.10	0.48	0.20	0.58	0.14	0.32	0.10
150–499	0.58	1.00	1.27	0.41	2.89	1.47	2.01	4.22	1.08	0.45
500–749	0.66	1.00	2.00	0.54	2.00	2.30	2.78	6.06	2.63	0.61
750 or more	0.87	1.33	2.13	0.65	2.78	2.40	2.63	5.68	2.80	0.69
District size								..		
Fewer than 1,000	0.31	0.51	0.38	0.33	2.47	0.39	0.56	2.19	0.33	0.37
1,000–9,999	0.78	1.06	2.14	0.87	2.75	2.74	3.00	5.54	3.09	0.91
10,000 or more	0.79	1.00	2.21	0.92	2.69	2.81	3.02	5.73	3.05	0.96
Community type										
Central city	0.61	0.97	1.83	0.98	1.47	2.20	2.33	4.54	2.94	1.02
Urban fringe/large town	0.68	1.09	1.61	1.09	2.83	2.18	3.02	3.84	3.00	1.13
Rural/small town	0.44	0.80	1.77	0.81	2.59	2.33	2.50	4.80	2.66	0.90
Free/reduced-price lunch recipients										
Less than 20 percent	0.77	1.27	1.80	0.97	3.02	2.33	2.33	4.49	3.11	1.03
20 percent or more	0.77	1.27	1.80	0.97	3.02	2.33	2.33	4.49	3.11	1.03
Minority enrollment										
Less than 20 percent	0.66	0.93	2.35	0.93	3.08	3.07	2.30	4.93	3.56	1.01
20 percent or more	0.66	0.93	2.35	0.93	3.08	3.07	2.30	4.93	3.56	1.01
Minority teachers										
Less than 20 percent	0.59	0.80	1.94	0.80	3.01	2.74	2.00	4.24	2.63	0.87
20 percent or more	0.59	0.80	1.94	0.80	3.01	2.74	2.00	4.24	2.63	0.87

Table A5—Standard errors for table 5: Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1993–94—Continued					
Principal										
Male	0.80	1.25	1.94	0.72	1.49	2.61	3.03	4.01	2.88	0.80
Female	0.80	1.25	1.94	0.72	1.49	2.61	3.03	4.01	2.88	0.80
Principal										
Minority	0.65	0.98	1.90	0.81	0.96	2.62	2.62	3.88	2.46	0.80
White, non-Hispanic	0.65	0.98	1.90	0.81	0.96	2.62	2.62	3.88	2.46	0.80
Region										
Northeast	0.30	0.52	1.44	0.54	1.95	2.38	1.60	5.53	2.40	0.57
Midwest	0.24	0.44	1.26	0.60	2.54	1.66	2.01	4.68	2.04	0.64
South	0.43	0.60	2.00	0.87	3.10	2.59	2.68	4.58	2.87	0.91
West	0.38	0.70	1.80	0.89	2.90	2.54	2.81	4.27	2.84	0.97
					1990–91					
Total	0	0	0	0	0	0	0	0	0	0
School size										
Fewer than 150	0.09	0.15	0.21	0.14	0.69	0.23	0.80	0.20	0.22	0.20
150–499	0.67	0.93	1.63	0.68	2.83	1.98	2.64	5.49	1.61	0.69
500–749	0.61	1.20	1.87	0.69	2.29	2.60	2.80	5.19	2.24	0.71
750 or more	0.63	0.97	2.35	1.00	3.13	3.06	3.31	4.60	2.99	1.04
District size										
Fewer than 1,000	0.30	0.51	0.50	0.28	2.17	0.50	0.82	1.57	0.40	0.32
1,000–9,999	0.82	1.24	2.48	1.09	2.52	3.46	3.60	4.10	3.22	1.23
10,000 or more	0.83	1.00	2.57	1.08	2.56	3.48	3.66	4.11	3.21	1.22

Table A5—Standard errors for table 5: Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1990–91—Continued					
Community type										
Central city	0.49	0.61	2.28	0.92	1.80	2.68	3.63	3.72	4.54	1.00
Urban fringe/large town	0.47	0.72	1.90	0.85	2.28	2.43	3.08	5.09	3.40	0.86
Rural/small town	0.38	0.63	2.22	0.82	2.62	2.59	3.49	6.37	3.29	1.00
Free/reduced-price lunch recipients										
Less than 20 percent	0.68	1.02	1.90	1.21	2.67	2.90	3.61	5.37	3.23	1.28
20 percent or more	0.68	1.02	1.90	1.21	2.67	2.90	3.61	5.37	3.23	1.28
Minority enrollment										
Less than 20 percent	0.62	1.01	1.98	1.16	1.82	2.87	3.38	4.97	3.74	1.40
20 percent or more	0.62	1.01	1.98	1.16	1.82	2.87	3.38	4.97	3.74	1.40
Minority teachers										
Less than 20 percent	0.59	0.87	1.81	1.01	2.12	2.53	2.68	4.43	4.30	1.06
20 percent or more	0.59	0.87	1.81	1.01	2.12	2.53	2.68	4.43	4.30	1.06
Principal										
Male	0.73	1.09	1.62	0.86	2.04	2.39	2.53	3.21	3.75	0.90
Female	0.73	1.09	1.62	0.86	2.04	2.39	2.53	3.21	3.75	0.90
Principal										
Minority	0.60	0.92	1.79	0.75	1.33	2.46	3.37	3.80	2.61	0.75
White, non-Hispanic	0.60	0.92	1.79	0.75	1.33	2.46	3.37	3.80	2.61	0.75
Region										
Northeast	0.28	0.41	1.49	0.82	2.43	2.05	2.24	4.81	2.49	0.85
Midwest	0.28	0.45	1.69	0.56	1.95	2.43	2.80	4.47	2.43	0.69
South	0.38	0.49	2.00	1.01	2.58	2.83	2.51	5.60	3.22	1.01
West	0.38	0.37	1.61	1.00	1.74	2.19	3.45	2.62	3.10	1.12

Table A5—Standard errors for table 5: Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88					
Total	0	0	0	0	0	0	0	0	0	0
School size										
Fewer than 150	0.09	0.15	0.18	0.10	0.65	0.21	0.31	0.60	0.19	0.12
150–499	0.53	0.83	1.41	0.43	2.30	1.90	2.66	4.14	1.91	0.46
500–749	0.69	0.97	1.88	0.75	2.33	2.46	3.39	3.69	3.03	0.68
750 or more	0.57	0.66	1.65	0.89	3.79	2.01	2.75	5.27	3.23	0.84
District size										
Fewer than 1,000	0.26	0.45	0.42	0.39	1.93	0.45	0.29	1.47	0.54	0.46
1,000–9,999	0.52	0.81	1.88	1.05	3.58	2.90	3.68	4.16	3.32	1.02
10,000 or more	0.45	0.61	1.95	1.01	2.42	2.99	3.76	4.35	3.40	1.01
Community type										
Central city	0.43	0.63	1.44	0.88	2.11	2.02	2.93	2.91	2.60	0.92
Urban fringe/large town	0.59	0.95	2.02	0.87	1.60	2.60	3.41	4.87	2.63	0.93
Rural/small town	0.44	0.58	1.76	0.77	1.98	2.15	2.95	4.58	1.85	0.90
Free/reduced-price lunch recipients										
Less than 20 percent	0.51	0.74	1.84	0.94	3.56	2.75	2.90	4.36	3.53	0.99
20 percent or more	0.51	0.74	1.84	0.94	3.56	2.75	2.90	4.36	3.53	0.99
Minority enrollment										
Less than 20 percent	0.43	0.60	1.60	0.80	2.95	2.43	2.60	3.93	3.02	0.93
20 percent or more	0.43	0.60	1.60	0.80	2.95	2.43	2.60	3.93	3.02	0.93
Minority teachers										
Less than 20 percent	0.41	0.57	1.76	0.70	2.29	2.74	2.28	3.71	3.19	0.79
20 percent or more	0.41	0.57	1.76	0.70	2.29	2.74	2.28	3.71	3.19	0.79

Table A5—Standard errors for table 5: Percentage distributions of public school students according to selected school characteristics, by school level and grade configuration of middle and secondary schools: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School level					Grade configurations of middle schools			Grade configurations of secondary schools	
	Total, all levels	Elementary	Middle	Secondary	Combined/ ungraded only	Grades 6–8	Grades 7–8	Other middle	Grades 7–9	Other secondary
					1987–88—Continued					
Principal										
Male	0.52	0.84	1.33	0.90	1.81	2.06	3.03	2.73	2.14	0.94
Female	0.52	0.84	1.33	0.90	1.81	2.06	3.03	2.73	2.14	0.94
Principal										
Minority	0.36	0.57	1.62	0.70	1.74	2.27	2.77	2.64	2.78	0.77
White, non-Hispanic	0.36	0.57	1.62	0.70	1.74	2.27	2.77	2.64	2.78	0.77
Region										
Northeast	0.15	0.31	1.00	0.42	1.72	1.32	1.74	3.57	2.12	0.46
South	0.22	0.35	1.13	0.58	2.23	1.79	2.13	3.84	2.03	0.76
Midwest	0.23	0.48	1.90	0.55	2.37	2.91	2.45	4.17	2.20	0.61
West	0.18	0.31	1.51	0.54	1.24	2.19	2.90	2.88	3.11	0.56

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A6—Standard errors for table 6: Percentage distribution of public school teachers according to type of class organization, and average class size for teachers in departments and self-contained classrooms, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Percentage of teachers in			Average class size in	
	Departments	Self-contained classrooms	Team-taught classes	Departments	Self-contained classrooms
			1993–94		
Total	0.55	0.59	0.27	0.08	0.21
School level					
Elementary	0.38	0.64	0.50	(*)	0.16
Middle	0.92	0.63	0.81	0.20	(*)
Secondary	0.22	0.20	0.08	0.07	(*)
Combined/ungraded only	1.22	1.20	1.00	0.38	1.84
Middle school grade configuration					
Grades 6–8	1.37	0.69	1.20	0.30	(*)
Grades 7–8	1.16	0.67	0.99	0.27	(*)
Other middle	2.60	2.80	1.91	0.62	(*)
Secondary school grade configuration					
Grades 7–9	0.95	0.64	0.69	0.26	(*)
Other secondary	0.22	0.20	0.07	0.08	(*)
			1990–91		
Total	0.54	0.52	0.26	0.09	0.10
School level					
Elementary	0.44	0.53	0.45	(*)	0.10
Middle	0.99	0.72	0.80	0.22	(*)
Secondary	0.40	0.30	0.21	0.10	(*)
Combined/ungraded only	3.24	2.45	1.31	0.40	0.60
Middle school grade configuration					
Grades 6–8	1.37	0.98	0.99	0.34	(*)
Grades 7–8	1.30	1.03	0.78	0.30	(*)
Other middle	3.19	2.02	2.67	0.49	(*)
Secondary school grade configuration					
Grades 7–9	0.71	0.59	0.40	0.40	(*)
Other secondary	0.37	0.33	0.20	0.11	(*)

Table A6—Standard errors for table 6: Percentage distribution of public school teachers according to type of class organization, and average class size for teachers in departments and self-contained classrooms, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Percentage of teachers in			Average class size in	
	Departments	Self-contained classrooms	Team-taught classes	Departments	Self-contained classrooms
			1987–88		
Total	0.32	0.30	0.15	0.13	0.10
School level					
Elementary	0.43	0.42	0.30	(*)	0.11
Middle	0.70	0.61	0.46	0.25	(*)
Secondary	0.34	0.33	0.14	0.15	(*)
Combined/ungraded only	1.40	1.29	0.60	0.30	0.69
Middle school grade configuration					
Grades 6–8	1.03	0.89	0.70	0.40	(*)
Grades 7–8	0.79	0.70	0.46	0.32	(*)
Other middle	2.14	1.81	1.31	0.58	(*)
Secondary school grade configuration					
Grades 7–9	0.75	0.73	0.47	0.37	(*)
Other secondary	0.39	0.37	0.14	0.16	(*)

*Data excluded for teachers at these school levels (see below).

NOTE: Teachers of elementary enrichment and "pull-out" classes (13 percent of all teachers) are excluded from this table, so the percentage distributions in the first three columns are based on a total of the three class types included. Teachers with special education as their main assignment field were also excluded from self-contained classroom columns.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A7—Standard errors for table 7: Percentage of public schools offering various instruction-related services, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Remedial reading/ English	Remedial mathe-matics	Gifted and talented program	Disa-bilities services	Magnet program	Bilingual instruc-tion	ESL instruc-tion	Chapter 1 services	Library/ media center
					1993–94				
Total	0.54	0.73	0.54	0.46	0.29	0.50	0.61	0.49	0.34
School level									
Elementary	0.81	1.07	0.87	0.70	0.44	0.82	0.85	0.74	0.44
Middle	1.40	1.72	1.73	1.23	0.81	1.30	1.81	1.77	0.76
Secondary	0.77	0.76	0.88	0.70	0.36	0.67	0.80	0.72	0.58
Combined/ungraded only	1.83	2.13	2.92	1.35	0.62	3.09	3.13	2.54	2.55
Middle school grade configuration									
Grades 6–8	1.81	2.11	2.17	1.99	0.84	2.03	2.28	2.29	0.39
Grades 7–8	2.34	2.55	2.49	2.37	2.16	1.67	2.41	2.31	0.31
Other middle	4.62	5.84	5.01	1.75	2.24	4.20	5.23	5.63	3.65
Secondary school grade configuration									
Grades 7–9	2.19	2.53	2.11	1.46	0.76	2.37	2.47	2.61	0
Other secondary	0.78	0.73	0.93	0.73	0.38	0.71	0.89	0.83	0.63
					1990–91				
Total	0.50	0.59	0.56	0.58	(*)	0.58	0.64	0.73	0.28
School level									
Elementary	0.72	0.83	0.78	0.80	(*)	0.85	0.88	0.83	0.42
Middle	1.78	2.09	1.58	1.65	(*)	1.54	2.11	1.83	0.67
Secondary	0.87	0.94	1.01	1.13	(*)	0.81	0.89	1.17	0.81
Combined/ungraded only	1.57	1.91	2.47	1.25	(*)	1.47	1.67	2.08	1.51
Middle school grade configuration									
Grades 6–8	2.41	2.49	2.63	2.07	(*)	2.13	3.02	2.56	0.22
Grades 7–8	3.60	3.50	3.14	2.78	(*)	2.24	4.00	2.87	2.60
Other middle	4.72	6.19	3.73	4.39	(*)	5.43	5.65	5.46	0.40
Secondary school grade configuration									
Grades 7–9	2.21	2.49	2.58	1.79	(*)	3.04	4.72	3.60	1.51
Other secondary	0.89	1.03	1.02	1.19	(*)	0.88	1.00	1.30	0.81

Table A7—Standard errors for table 7: Percentage of public schools offering various instruction-related services, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Remedial reading/ English	Remedial mathe-matics	Gifted and talented program	Disa-bilities services	Magnet program	Bilingual instruc-tion	ESL instruc-tion	Chapter 1 services	Library/ media center
					1987–88				
Total	0.48	0.54	0.51	0.40	(*)	0.48	0.60	0.46	(*)
School level									
Elementary	0.62	0.70	0.72	0.63	(*)	0.62	0.83	0.63	(*)
Middle	1.11	1.61	1.21	0.66	(*)	1.44	1.56	1.54	(*)
Secondary	0.80	0.95	0.97	0.76	(*)	0.70	0.76	0.97	(*)
Combined/ungraded only	1.78	1.91	1.87	1.34	(*)	1.41	1.61	1.29	(*)
Middle school grade configuration									
Grades 6–8	1.76	2.00	1.76	1.01	(*)	2.16	2.08	2.59	(*)
Grades 7–8	1.97	3.28	1.97	1.00	(*)	2.64	2.94	2.46	(*)
Other middle	3.16	4.45	2.87	1.32	(*)	2.97	4.15	3.41	(*)
Secondary school grade configuration									
Grades 7–9	2.36	2.72	2.34	1.80	(*)	2.30	3.42	3.08	(*)
Other secondary	0.84	1.10	1.09	0.80	(*)	0.73	0.93	0.90	(*)

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaire): 1987–88, 1990–91, and 1993–94.

Table A8—Standard errors for table 8: Percentage of public schools offering various health-related services, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Diagnostic and prescriptive services	Medical services	Drug and alcohol prevention	Substance abuse counseling	Free/ reduced-price lunch
			1993–94		
Total	0.62	0.72	0.37	0.60	0.33
School level					
Elementary	0.94	1.04	0.41	0.79	0.48
Middle	1.22	1.99	1.09	1.81	1.10
Secondary	0.64	0.81	0.52	0.83	0.55
Combined/ungraded only	1.40	2.20	2.92	2.71	1.43
Middle school grade configuration					
Grades 6–8	1.82	2.38	1.06	2.85	1.09
Grades 7–8	2.61	2.67	2.07	2.36	1.98
Other middle	3.99	5.16	3.50	4.76	2.88
Secondary school grade configuration					
Grades 7–9	2.08	2.81	1.58	3.17	0.77
Other secondary	0.63	0.87	0.61	0.92	0.60
			1990–91		
Total	0.58	(*)	(*)	(*)	0.31
School level					
Elementary	0.87	(*)	(*)	(*)	0.38
Middle	1.40	(*)	(*)	(*)	0.81
Secondary	1.00	(*)	(*)	(*)	0.80
Combined/ungraded only	1.68	(*)	(*)	(*)	1.40
Middle school grade configuration					
Grades 6–8	1.82	(*)	(*)	(*)	0.47
Grades 7–8	2.49	(*)	(*)	(*)	2.57
Other middle	3.43	(*)	(*)	(*)	1.39
Secondary school grade configuration					
Grades 7–9	2.18	(*)	(*)	(*)	1.00
Other secondary	1.07	(*)	(*)	(*)	0.84

Table A8—Standard errors for table 8: Percentage of public schools offering various health-related services, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Diagnostic and prescriptive services	Medical services	Drug and alcohol prevention	Substance abuse counseling	Free/ reduced-price lunch
			1987–88		
Total	0.59	(*)	(*)	(*)	0.10
School level					
Elementary	0.92	(*)	(*)	(*)	0.13
Middle	1.55	(*)	(*)	(*)	0.16
Secondary	0.89	(*)	(*)	(*)	0.31
Combined/ungraded only	1.63	(*)	(*)	(*)	0.54
Middle school grade configuration					
Grades 6–8	2.06	(*)	(*)	(*)	0.28
Grades 7–8	2.51	(*)	(*)	(*)	0.27
Other middle	4.01	(*)	(*)	(*)	0
Secondary school grade configuration					
Grades 7–9	3.04	(*)	(*)	(*)	0.38
Other secondary	0.96	(*)	(*)	(*)	0.37

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A9—Standard errors for table 9: Percentage of public schools that had decision-making bodies other than school boards, student councils, or PTAs, and percentage of these bodies that included certain groups, by school level and grade configuration: 1993–94

	Percentage of schools with such a body	Percentage of decision-making bodies with:				
		Teachers	Principal or vice-principal	Parents	Students	Superintendent or district or community representatives
Total	0.72	0.30	0.29	0.79	0.83	0.91
School level						
Elementary	1.00	0.42	0.43	1.00	1.06	1.28
Middle	1.57	0.86	0.66	2.46	1.93	2.53
Secondary	0.94	0.73	0.74	1.25	1.16	1.43
Combined/ungraded only	2.47	1.59	1.63	2.73	4.09	3.57
Middle school grade configuration						
Grades 6–8	2.11	0.61	0.87	2.92	2.59	3.54
Grades 7–8	2.52	2.79	1.04	2.99	3.45	4.45
Other middle	5.01	2.50	0.90	6.74	5.96	6.39
Secondary school grade configuration						
Grades 7–9	2.49	1.44	0.99	2.75	3.36	3.52
Other secondary	0.98	0.79	0.82	1.39	1.24	1.49

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaires): 1993–94.

Table A10—Standard errors for table 10: Percentage of public schools' site-based decision-making bodies that had various functions or areas of responsibility, by school level and grade configuration: 1993–94

	Areas of responsibility					
	School resource issues	Aids principal with budget or spending issues	Confers on school personnel issues	Considers input on curriculum or discipline issues	Plans transportation routes	School and district liaisons on operations
Total	0.84	0.74	0.99	0.70	0.40	1.02
School level						
Elementary	1.23	1.21	1.41	0.95	0.44	1.45
Middle	1.48	1.97	2.72	1.82	0.95	2.56
Secondary	1.31	1.03	1.08	1.02	0.43	1.19
Combined/ungraded only	3.12	4.42	4.42	5.05	4.85	4.10
Middle school grade configuration						
Grades 6–8	2.11	2.98	3.24	2.23	1.21	3.36
Grades 7–8	2.63	2.87	3.74	2.38	2.70	4.09
Other middle	5.36	6.27	7.66	7.91	—	5.37
Secondary school grade configuration						
Grades 7–9	2.99	3.66	2.90	2.38	0.97	4.07
Other secondary	1.43	1.07	1.18	1.05	0.48	1.35

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaires): 1993–94.

Table A11—Standard errors for table 11: Percentage of public school principals who reported that they had a lot of influence on decisions in various school management areas, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	School budget decisions	Hiring full-time teachers	Establishing curriculum	Determining the content of inservice training	Teacher evaluation	Setting discipline policy
			1993–94			
Total	0.73	0.61	0.70	0.73	0.32	0.46
School level						
Elementary	1.04	1.00	1.01	1.02	0.49	0.72
Middle	1.86	1.00	1.61	1.53	0.92	1.31
Secondary	0.76	0.51	0.90	1.01	0.41	0.60
Combined/ungraded only	2.23	3.17	2.41	2.06	0.97	1.24
Middle school grade configuration						
Grades 6–8	2.62	1.37	2.21	2.29	1.38	1.98
Grades 7–8	2.74	1.52	2.61	2.39	1.05	2.11
Other middle	4.20	2.60	4.83	3.10	2.42	2.41
Secondary school grade configuration						
Grades 7–9	2.61	2.10	3.22	2.81	1.29	1.73
Other secondary	0.83	0.50	0.96	1.03	0.41	0.60
			1990–91			
Total	(*)	0.60	0.74	(*)	(*)	0.53
School level						
Elementary	(*)	0.82	1.01	(*)	(*)	0.74
Middle	(*)	1.49	2.28	(*)	(*)	1.77
Secondary	(*)	0.60	1.09	(*)	(*)	0.69
Combined/ungraded only	(*)	1.72	2.69	(*)	(*)	2.05
Middle school grade configuration						
Grades 6–8	(*)	1.91	2.76	(*)	(*)	2.38
Grades 7–8	(*)	2.83	3.63	(*)	(*)	2.21
Other middle	(*)	3.74	5.45	(*)	(*)	5.36
Secondary school grade configuration						
Grades 7–9	(*)	3.17	2.87	(*)	(*)	2.84
Other secondary	(*)	0.58	1.19	(*)	(*)	0.66

Table A11—Standard errors for table 11: Percentage of public school principals who reported that they had a lot of influence on decisions in various school management areas, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School budget decisions	Hiring full-time teachers	Establishing curriculum	Determining the content of inservice training	Teacher evaluation	Setting discipline policy
			1987–88			
Total	(*)	0.57	0.47	(*)	(*)	0.44
School level						
Elementary	(*)	0.79	0.69	(*)	(*)	0.69
Middle	(*)	1.22	1.78	(*)	(*)	1.18
Secondary	(*)	0.80	1.00	(*)	(*)	0.60
Combined/ungraded only	(*)	1.90	1.61	(*)	(*)	1.23
Middle school grade configuration						
Grades 6–8	(*)	1.98	2.91	(*)	(*)	1.29
Grades 7–8	(*)	2.42	2.66	(*)	(*)	2.09
Other middle	(*)	3.17	3.84	(*)	(*)	3.18
Secondary school grade configuration						
Grades 7–9	(*)	2.33	3.41	(*)	(*)	2.90
Other secondary	(*)	0.97	1.02	(*)	(*)	0.67

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A12—Standard errors for table 12: Percentage of public school teachers who reported that teachers had a lot of influence on decisions in various school management areas, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	School budget decisions	Hiring full-time teachers	Establishing curriculum	Determining the content of inservice training	Teacher evaluation	Setting discipline policy
			1993–94			
Total	0.24	0.23	0.38	0.42	0.12	0.41
School level						
Elementary	0.44	0.49	0.68	0.68	0.22	0.68
Middle	0.84	0.58	1.01	1.00	0.31	1.00
Secondary	0.21	0.23	0.36	0.39	0.15	0.33
Combined/ungraded only	1.29	1.39	2.00	1.60	0.34	1.12
Middle school grade configuration						
Grades 6–8	1.21	0.80	1.53	1.40	0.46	1.43
Grades 7–8	0.78	0.87	1.32	1.44	0.39	1.64
Other middle	1.24	1.40	2.54	2.18	0.40	3.28
Secondary school grade configuration						
Grades 7–9	1.14	0.72	1.87	1.67	0.41	1.52
Other secondary	0.21	0.25	0.39	0.41	0.20	0.41
			1990–91			
Total	(*)	(*)	0.37	0.40	(*)	0.35
School level						
Elementary	(*)	(*)	0.59	0.64	(*)	0.57
Middle	(*)	(*)	1.20	1.10	(*)	1.02
Secondary	(*)	(*)	0.57	0.56	(*)	0.49
Combined/ungraded only	(*)	(*)	1.73	1.04	(*)	1.91
Middle school grade configuration						
Grades 6–8	(*)	(*)	1.76	1.57	(*)	1.43
Grades 7–8	(*)	(*)	1.40	1.72	(*)	1.82
Other middle	(*)	(*)	2.70	2.56	(*)	1.99
Secondary school grade configuration						
Grades 7–9	(*)	(*)	1.93	1.75	(*)	2.21
Other secondary	(*)	(*)	0.62	0.59	(*)	0.49

Table A12—Standard errors for table 12: Percentage of public school teachers who reported that teachers had a lot of influence on decisions in various school management areas, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	School budget decisions	Hiring full-time teachers	Establishing curriculum	Determining the content of inservice training	Teacher evaluation	Setting discipline policy
			1987–88			
Total	(*)	(*)	0.35	0.33	(*)	0.39
School level						
Elementary	(*)	(*)	0.50	0.59	(*)	0.68
Middle	(*)	(*)	0.88	1.00	(*)	0.99
Secondary	(*)	(*)	0.60	0.49	(*)	0.50
Combined/ungraded only	(*)	(*)	1.09	1.17	(*)	0.99
Middle school grade configuration						
Grades 6–8	(*)	(*)	1.52	1.30	(*)	1.53
Grades 7–8	(*)	(*)	1.27	1.78	(*)	1.73
Other middle	(*)	(*)	2.74	2.58	(*)	2.29
Secondary school grade configuration						
Grades 7–9	(*)	(*)	1.42	1.45	(*)	1.61
Other secondary	(*)	(*)	0.66	0.55	(*)	0.55

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A13—Standard errors for table 13: Percentage distribution of public school teachers according to type of certification they had in their main and other assignment field, by school level and grade configuration: 1993–94

School characteristics	Certification in main assignment field				Certification in other assignment field			
	Advanced	Regular or alternative	Provisional, probationary, temporary, or emergency	No certification	Advanced	Regular or alternative	Provisional, probationary, temporary, or emergency	No certification
Total	0.20	0.31	0.18	0.15	0.45	0.78	0.20	0.74
School level								
Elementary	0.40	0.51	0.24	0.23	1.23	2.05	0.63	2.00
Middle	0.64	1.01	0.62	0.43	0.72	2.11	0.71	1.81
Secondary	0.27	0.29	0.20	0.15	0.40	0.60	0.27	0.61
Combined/ungraded only	0.45	0.72	0.60	0.41	1.00	1.92	0.59	2.03
Middle school grade configuration								
Grades 6–8	0.91	1.51	0.85	0.65	1.03	2.93	1.01	2.56
Grades 7–8	1.20	1.29	0.41	0.44	1.13	2.24	0.73	2.04
Other middle	2.08	2.19	1.19	1.02	1.88	4.76	1.13	4.68
Secondary school grade configuration								
Grades 7–9	0.97	1.08	0.56	0.40	2.21	2.38	1.00	2.07
Other secondary	0.29	0.32	0.21	0.20	0.36	0.68	0.29	0.66

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table A14—Standard errors for table 14: Percentage distribution of public middle and secondary school core subject teachers in departments according to type of certification in their main assignment field, by field and school level: 1993–94

Field and school level	Advanced	Regular or alternative	Provisional, probationary, temporary, or emergency	No certification
Total	0.29	0.42	0.29	0.21
Mathematics	0.81	1.07	0.63	0.63
Middle schools	1.84	2.62	1.82	1.71
Secondary schools	0.74	0.84	0.41	0.38
Science	0.69	0.76	0.44	0.50
Middle schools	1.67	2.12	0.99	1.37
Secondary schools	0.78	0.84	0.57	0.30
English	0.79	1.14	0.62	0.62
Middle schools	1.70	2.70	1.62	1.51
Secondary schools	0.63	0.69	0.30	0.27
Social science	0.84	1.05	0.51	0.63
Middle schools	1.53	2.52	1.38	1.95
Secondary schools	0.81	0.94	0.48	0.36
Foreign language	0.83	1.40	1.12	0.82
Middle schools	2.93	6.68	5.27	3.61
Secondary schools	0.99	1.14	0.61	0.45

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table A15—Standard errors for table 15: Percentage distributions of public school teachers according to highest degree earned and years of teaching experience, and average years of experience, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Highest degree			Years of experience				
	Bachelor's or less	Master's	Higher than a master's degree	3 or fewer years	4–9 years	10–19 years	20 or more years	Average years
				1993–94				
Total	0.33	0.33	0.20	0.21	0.20	0.40	0.33	0.06
School level								
Elementary	0.58	0.58	0.25	0.39	0.41	0.64	0.60	0.11
Middle	1.04	0.96	0.51	0.69	0.71	0.87	1.08	0.22
Secondary	0.37	0.35	0.17	0.23	0.30	0.41	0.41	0.07
Combined/ungraded only	1.20	1.00	0.57	0.68	0.89	1.36	1.21	0.24
Middle school grade configuration								
Grades 6–8	1.40	1.24	0.68	1.03	0.92	1.31	1.61	0.31
Grades 7–8	1.40	1.60	0.71	0.63	1.21	1.13	1.17	0.23
Other middle	3.62	3.29	1.16	1.21	2.40	1.97	3.33	0.67
Secondary school grade configuration								
Grades 7–9	1.70	1.68	0.51	0.83	1.10	1.28	1.43	0.28
Other secondary	0.43	0.41	0.17	0.25	0.31	0.36	0.42	0.08
				1990–91				
Total	0.31	0.32	0.20	0.20	0.28	0.34	0.31	0.06
School level								
Elementary	0.57	0.51	0.26	0.36	0.40	0.59	0.61	0.10
Middle	1.39	1.43	0.41	0.67	0.81	0.99	1.00	0.20
Secondary	0.54	0.52	0.29	0.27	0.43	0.41	0.60	0.11
Combined/ungraded only	1.36	1.52	0.60	0.94	0.87	1.44	1.91	0.26
Middle school grade configuration								
Grades 6–8	1.97	1.96	0.60	0.92	1.11	1.21	1.40	0.31
Grades 7–8	2.20	2.01	0.79	0.91	1.07	1.23	1.50	0.21
Other middle	2.63	2.61	0.98	1.54	2.58	2.10	2.20	0.37
Secondary school grade configuration								
Grades 7–9	2.05	1.92	0.88	0.72	1.21	1.51	1.60	0.32
Other secondary	0.60	0.59	0.29	0.28	0.43	0.43	0.62	0.12

Table A15—Standard errors for table 15: Percentage distributions of public school teachers according to highest degree earned and years of teaching experience, and average years of experience, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Highest degree			Years of experience				
	Bachelor's or less	Master's	Higher than a master's degree	3 or fewer years	4–9 years	10–19 years	20 or more years	Average years
				1987–88				
Total	0.27	0.30	0.15	0.15	0.23	0.24	0.24	0.05
School level								
Elementary	0.47	0.49	0.20	0.24	0.38	0.46	0.50	0.09
Middle	0.92	0.75	0.62	0.45	0.83	0.77	0.70	0.14
Secondary	0.43	0.45	0.23	0.22	0.35	0.31	0.30	0.06
Combined/ungraded only	1.53	1.29	0.62	0.55	0.68	0.99	0.90	0.17
Middle school grade configuration								
Grades 6–8	1.07	1.03	0.85	0.74	1.07	1.32	1.01	0.18
Grades 7–8	2.15	1.68	1.18	0.66	1.09	1.22	1.10	0.24
Other middle	2.35	2.45	0.96	0.96	1.85	3.07	2.39	0.37
Secondary school grade configuration								
Grades 7–9	1.66	1.52	0.79	0.90	1.05	1.27	1.56	0.27
Other secondary	0.47	0.48	0.27	0.24	0.35	0.36	0.38	0.08

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A16—Standard errors for table 16: Percentage of teachers who participated in an inservice or professional development program that focused on various topics since the end of the last school year, by school level and grade configuration: 1993–94

School characteristics	Uses of educational technology for instruction	Methods of teaching in their fields	In-depth study in their subject	Student assessment	Cooperative learning in the classroom
Total	0.40	0.36	0.29	0.40	0.34
School level					
Elementary	0.67	0.59	0.54	0.63	0.59
Middle	1.20	0.94	0.83	0.86	1.03
Secondary	0.44	0.44	0.28	0.47	0.51
Combined/ungraded only	1.28	1.01	1.00	0.90	1.44
Middle school grade configuration					
Grades 6–8	1.69	1.42	0.97	1.18	1.43
Grades 7–8	1.52	1.23	1.41	1.29	1.41
Other middle	3.44	2.87	2.43	3.23	2.70
Secondary school grade configuration					
Grades 7–9	1.68	1.60	1.10	2.10	1.80
Other secondary	0.44	0.45	0.31	0.46	0.50

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table A17—Standard errors for table 17: Of public school teachers who had participated in recent inservice training on various topics,* the percentages who agreed with a range of statements about the training's effects, by school level and grade configuration: 1993–94

School characteristics	Provided information new to me	Caused me to seek more information or training	Caused change in my teaching practices	Changed my views on teaching	Generally a waste of time
Total	0.25	0.40	0.32	0.34	0.24
School level					
Elementary	0.50	0.68	0.57	0.61	0.41
Middle	0.78	0.92	0.93	1.12	0.57
Secondary	0.31	0.41	0.41	0.47	0.33
Combined/ungraded only	0.89	1.11	1.41	1.40	0.77
Middle school grade configuration					
Grades 6–8	1.12	1.40	1.19	1.61	0.81
Grades 7–8	1.12	1.04	1.16	1.19	0.83
Other middle	1.90	2.24	2.80	2.31	2.15
Secondary school grade configuration					
Grades 7–9	1.17	1.58	1.69	1.74	1.00
Other secondary	0.30	0.41	0.40	0.44	0.33

*The five topics were the uses of educational technology, teaching methods in their subject, in-depth study of their subject, student assessment, and cooperative learning in the classroom.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table A18—Standard errors for table 18: Percentage distributions of public school principals according to highest degree earned and years of experience as a principal, and average years of experience, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Highest degree earned			Years of experience as principal			Average years as principal	
	Bachelor's or less	Master's or education specialist	Doctorate or professional	3 or fewer	4–9 years	10 or more years	Total	At current school
				1993–94				
Total	0.21	0.65	0.60	0.57	0.67	0.54	0.10	0.08
School level								
Elementary	0.33	0.99	0.97	0.80	0.99	0.73	0.20	0.11
Middle	0.36	1.93	1.89	1.40	1.57	1.48	0.24	0.20
Secondary	0.17	0.78	0.81	0.82	0.92	1.05	0.13	0.09
Combined/ungraded only	0.44	2.80	2.71	2.22	2.97	2.28	0.29	0.16
Middle school grade configuration								
Grades 6–8	0.38	2.52	2.53	2.28	2.51	2.18	0.40	0.31
Grades 7–8	1.34	2.49	2.02	2.60	2.86	2.60	0.34	0.28
Other middle	—	4.56	4.56	4.57	4.63	4.74	0.61	0.40
Secondary school grade configuration								
Grades 7–9	—	3.27	3.27	3.07	3.00	2.92	0.43	0.34
Other secondary	0.18	0.78	0.81	0.90	0.99	1.13	0.14	0.10
				1990–91				
Total	0.23	0.70	0.68	0.68	0.65	0.81	0.14	0.10
School level								
Elementary	0.28	1.07	1.04	0.91	1.11	1.22	0.19	0.13
Middle	0.81	1.82	1.78	1.90	1.93	1.79	0.25	0.22
Secondary	0.33	1.10	1.18	0.91	1.02	1.13	0.20	0.19
Combined/ungraded only	0.88	2.37	2.40	2.43	2.29	2.54	0.41	0.22
Middle school grade configuration								
Grades 6–8	0.42	2.50	2.53	2.21	2.64	2.50	0.41	0.32
Grades 7–8	0.65	2.80	2.75	3.31	3.50	3.17	0.52	0.38
Other middle	—	5.84	5.17	6.61	4.89	6.59	0.98	0.64
Secondary school grade configuration								
Grades 7–9	—	3.05	3.04	2.46	3.03	3.21	0.54	0.37
Other secondary	0.37	1.21	1.25	1.00	1.10	1.24	0.28	0.21

Table A18—Standard errors for table 18: Percentage distributions of public school principals according to highest degree earned and years of experience as a principal, and average years of experience, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Highest degree earned			Years of experience as principal			Average years as principal	
	Bachelor's or less	Master's or education specialist	Doctorate or professional	3 or fewer	4–9 years	10 or more years	Total	At current school
				1987–88				
Total	0.25	0.50	0.52	0.51	0.64	0.64	0.09	0.07
School level								
Elementary	0.39	0.82	0.84	0.75	0.94	0.86	0.12	0.09
Middle	0.21	1.62	1.60	1.74	1.78	2.00	0.27	0.22
Secondary	0.21	1.13	1.23	0.61	1.07	1.02	0.15	0.10
Combined/ungraded only	0.74	2.05	2.07	1.27	1.91	2.01	0.26	0.23
Middle school grade configuration								
Grades 6–8	—	2.68	2.67	2.09	2.64	2.62	0.31	0.25
Grades 7–8	—	2.83	2.70	2.21	3.01	2.86	0.43	0.39
Other middle	—	4.00	3.96	4.19	3.44	4.16	0.60	0.49
Secondary school grade configuration								
Grades 7–9	—	2.92	2.95	2.44	2.40	2.35	0.38	0.31
Other secondary	0.22	1.14	1.21	0.67	1.10	1.05	0.15	0.11

—Too few sample observations for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A19—Standard errors for table 19: Percentage of principals who had received various types of training for school administration, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Training or development program for aspiring principals	Other training			
		Inservice training in evaluation and supervision	Training in management techniques	Administrative internship	None of these types of training
			1993–94		
Total	0.61	0.41	0.57	0.75	0.40
School level					
Elementary	0.84	0.67	0.82	1.02	0.42
Middle	1.93	1.30	1.45	2.29	0.89
Secondary	0.93	0.72	0.80	0.85	0.48
Combined/ungraded only	2.99	1.21	1.85	3.02	1.04
Middle school grade configuration					
Grades 6–8	2.88	1.69	2.09	3.01	1.32
Grades 7–8	2.32	2.21	2.12	2.82	1.41
Other middle	4.74	3.74	4.74	4.93	2.03
Secondary school grade configuration					
Grades 7–9	2.85	2.87	2.94	2.83	1.83
Other secondary	1.05	0.73	0.84	0.89	0.49
			1990–91		
Total	0.72	0.42	0.58	0.75	0.39
School level					
Elementary	0.99	0.60	0.90	1.07	0.57
Middle	2.20	1.22	1.50	1.91	0.89
Secondary	1.04	0.61	0.84	1.07	0.49
Combined/ungraded only	2.02	1.16	1.71	2.69	0.79
Middle school grade configuration					
Grades 6–8	3.00	1.58	2.18	2.95	1.33
Grades 7–8	3.17	3.28	3.24	3.78	1.73
Other middle	6.21	3.01	4.03	4.01	1.66
Secondary school grade configuration					
Grades 7–9	3.24	1.56	2.61	3.40	1.36
Other secondary	1.08	0.67	0.92	1.13	0.53

Table A19—Standard errors for table 19: Percentage of principals who had received various types of training for school administration, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Training or development program for aspiring principals	Other training			
		Inservice training in evaluation and supervision	Training in management techniques	Administrative internship	None of these types of training
			1987–88		
Total	(*)	0.34	0.53	0.57	0.27
School level					
Elementary	(*)	0.51	0.81	0.85	0.36
Middle	(*)	1.10	1.57	1.74	0.93
Secondary	(*)	0.62	0.73	1.02	0.63
Combined/ungraded only	(*)	1.57	1.74	1.96	1.32
Middle school grade configuration					
Grades 6–8	(*)	1.09	2.18	2.13	1.12
Grades 7–8	(*)	2.23	2.84	2.88	2.04
Other middle	(*)	2.43	2.91	3.83	2.21
Secondary school grade configuration					
Grades 7–9	(*)	1.83	2.58	2.43	1.63
Other secondary	(*)	0.66	0.77	1.11	0.66

*Data not collected for this variable in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A20—Standard errors for table 20: Percentage of public schools with teaching vacancies that found them very difficult or impossible to fill, and percentage that used various strategies for filling them, by school level and grade configuration: 1993–94

School characteristics	Percent with great difficulty filling vacancies	Methods used to fill vacancies						
		Hired qualified teacher	Hired less than qualified teacher	Used substitute teacher	Assigned other teacher or administrator	Expanded class sizes	Increased teaching loads	Other
Total	0.62	0.43	0.40	0.58	0.31	0.32	0.54	0.31
School level								
Elementary	0.80	0.62	0.58	0.82	0.41	0.40	0.39	0.42
Middle	2.00	1.13	1.16	1.60	1.33	0.69	2.02	0.81
Secondary	0.77	0.40	0.58	0.60	0.44	0.53	0.61	0.41
Combined/ungraded only	3.51	1.50	1.77	3.52	3.81	3.82	3.07	3.80
Middle school grade configuration								
Grades 6–8	2.51	1.60	1.60	2.07	1.99	0.92	2.73	0.77
Grades 7–8	2.59	1.06	1.96	1.96	1.49	1.61	2.08	1.01
Other middle	4.50	2.07	2.20	3.75	1.81	1.34	4.67	3.61
Secondary school grade configuration								
Grades 7–9	2.61	1.67	1.80	2.37	2.14	1.75	2.92	0.82
Other secondary	0.90	0.41	0.56	0.58	0.45	0.58	0.67	0.43

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School Questionnaires): 1993–94.

Table A21—Standard errors for table 21: Ratio of students per full-time-equivalent teacher in public schools, and percentage of public schools with librarians and counselors, by school level and grade configuration: 1993–94

School characteristics	Students per FTE teacher	Percentage of schools with: Librarians or media specialists	Counselors
Total	0.06	0.01	0.58
School level			
Elementary	0.08	0.03	1.01
Middle	0.19	0	0.97
Secondary	0.11	0.25	0.60
Combined/ungraded only	0.39	0.09	2.84
Middle school grade configuration			
Grades 6–8	0.24	0	0.82
Grades 7–8	0.31	0.24	2.00
Other middle	0.59	0	3.37
Secondary school grade configuration			
Grades 7–9	0.22	0	0.63
Other secondary	0.12	0.27	0.59

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1993–94.

Table A22—Standard errors for table 22: Percentage distribution of public school teachers according to their teaching status the following school year, by school level and grade configuration: 1993–95, 1990–92, and 1987–89

School characteristics	Stayed at same school	Moved to different school	Left teaching
		1993–95	
Total	0.52	0.35	0.34
School level			
Elementary	0.83	0.52	0.59
Middle	2.09	1.29	1.26
Secondary	0.69	0.50	0.48
Combined/ungraded only	1.87	1.42	1.04
Middle school grade configuration			
Grades 6–8	2.63	1.73	1.47
Grades 7–8	2.86	1.56	2.14
Other middle	3.61	1.48	3.28
Secondary school grade configuration			
Grades 7–9	2.64	1.91	1.39
Other secondary	0.70	0.52	0.52
		1990–92	
Total	0.49	0.34	0.41
School level			
Elementary	0.68	0.56	0.49
Middle	1.54	0.99	1.13
Secondary	0.97	0.69	0.56
Combined/ungraded only	2.23	2.00	1.29
Middle school grade configuration			
Grades 6–8	2.01	1.18	1.59
Grades 7–8	2.88	2.42	1.97
Other middle	2.81	2.16	1.41
Secondary school grade configuration			
Grades 7–9	2.05	1.60	1.28
Other secondary	1.03	0.75	0.60

Table A22—Standard errors for table 22: Percentage distribution of public school teachers according to their teaching status the following school year, by school level and grade configuration: 1993–95, 1990–92, and 1987–89—Continued

School characteristics	Stayed at same school	Moved to different school	Left teaching
		1987–88	
Total	0.47	0.42	0.30
School level			
Elementary	0.73	0.60	0.42
Middle	1.39	1.09	0.62
Secondary	0.95	0.84	0.48
Combined/ungraded only	1.78	1.12	1.35
Middle school grade configuration			
Grades 6–8	1.79	1.34	1.02
Grades 7–8	1.79	1.48	0.79
Other middle	6.90	6.19	1.86
Secondary school grade configuration			
Grades 7–9	3.20	3.03	1.02
Other secondary	1.04	0.88	0.51

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-Up Survey: 1988–89, 1991–92, and 1994–95.

Table A23—Standard errors for table 23: Percentage of public school principals who rated various goals as one of their top three, by school level and grade configuration: 1993–94

	Basic literacy skills	Academic excellence	Good work habits/ self-discipline	Personal growth	Human relations skills	Occupational/ vocational skills	Multicultural awareness	Specific moral values
Total	0.60	0.67	0.75	0.61	0.54	0.40	0.55	0.30
School level								
Elementary	0.73	1.11	1.13	0.93	0.94	0.57	0.81	0.42
Middle	2.10	1.67	1.84	2.02	1.15	1.38	0.96	0.96
Secondary	0.98	1.01	0.96	0.95	0.57	0.78	0.48	0.39
Combined/ungraded on	3.07	2.59	3.17	2.51	1.57	2.76	3.40	1.18
Middle school grade configuration								
Grades 6–8	2.55	2.06	2.75	2.72	1.97	1.82	1.14	1.21
Grades 7–8	2.88	2.85	2.87	2.70	2.32	2.25	1.18	1.41
Other middle	4.82	5.29	4.90	5.21	4.39	2.55	2.76	3.96
Secondary school grade configuration								
Grades 7–9	2.98	2.81	2.75	3.33	3.03	2.08	2.18	1.71
Other secondary	1.03	1.05	1.04	0.95	0.57	0.83	0.48	0.45

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1993–94.

Table A24—Standard errors for table 24: Percentage of public school teachers who had their students engage in various activities in class at least once a week, by school level and grade configuration: 1994–95

School characteristics	Lead or participate in whole-group discussions	Respond orally to open-ended questions	Used printed material other than textbooks	Work on group projects or presentations	Confer with other students or evaluate their work	Work on problems with several answers or methods of solution	Explain links between class learning and real world	Evaluate and improve own work
Total	0.85	0.85	1.00	1.38	1.20	1.20	1.11	1.17
School level								
Elementary	1.19	1.02	1.43	2.01	1.74	1.65	1.70	1.62
Middle	2.81	2.99	3.00	4.14	3.19	3.46	2.80	3.20
Secondary	1.77	1.60	1.75	2.00	1.94	1.91	2.16	2.53
Combined/ungraded only	5.97	4.93	5.12	6.19	8.21	6.52	5.41	6.01
Middle school grade configuration								
Grades 6–8	4.00	3.58	3.40	4.21	4.27	4.02	4.27	4.08
Grades 7–8	4.22	5.34	7.02	6.45	5.41	6.21	4.99	6.13
Other middle	7.94	6.68	8.02	9.78	8.63	8.64	8.60	7.90
Secondary school grade configuration								
Grades 7–9	9.91	8.01	5.14	6.39	10.70	10.79	9.32	10.52
Other secondary	1.67	1.61	1.81	2.20	2.01	1.95	2.21	2.61

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1994–95.

Table A25—Standard errors for table 25: Percentage of public school teachers who emphasized specific skills at least once a week, by school level and grade configuration: 1994–95

School characteristics	Generalizing from patterns or examples	Analyzing and interpreting information	Organizing, summarizing, or displaying information
Total	0.86	0.88	1.03
School level			
Elementary	1.41	1.41	1.73
Middle	3.32	3.20	3.43
Secondary	1.61	1.24	1.82
Combined/ungraded only	4.09	5.67	5.20
Middle school grade configuration			
Grades 6–8	4.52	4.31	4.07
Grades 7–8	4.92	5.27	4.79
Other middle	6.33	7.57	5.94
Secondary school grade configuration			
Grades 7–9	9.19	10.33	10.09
Other secondary	1.67	1.34	1.83

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1994–95.

Table A26—Standard errors for table 26: Percentage of public school teachers who assigned their students various homework activities at least once a week, by school level and grade configuration: 1994–95

School characteristics	Prepare written report	Prepare oral report	Work on problems with no obvious method of solution	Apply concepts to unfamiliar situation	Work on project, gather data, or conduct experiment	Write journal entry	Write short assignment
Total	1.04	0.70	0.81	1.15	1.06	1.07	1.25
School level							
Elementary	1.51	1.10	1.13	1.37	1.54	1.84	1.81
Middle	2.40	1.52	2.84	2.90	2.99	3.24	3.45
Secondary	1.84	1.15	1.40	2.30	1.81	1.80	2.08
Combined/ungraded only	2.55	—	3.11	6.86	5.06	4.86	5.69
Middle school grade configuration							
Grades 6–8	3.64	2.22	4.24	4.20	3.92	4.22	4.74
Grades 7–8	5.14	3.34	4.11	6.57	5.63	7.54	7.19
Other middle	5.63	—	—	7.33	5.63	8.58	8.66
Secondary school grade configuration							
Grades 7–9	6.35	—	5.13	9.44	10.28	6.22	10.70
Other secondary	1.75	1.13	1.44	2.41	1.75	1.89	1.97

—Too few sample observations for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1994–95.

Table A27—Standard errors for table 27: Percentage of public school teachers who agreed with various statements about their schools, by school level and grade configuration: 1993–94 and 1987–88*

School characteristics	Teachers participate in important educational decisions	I receive a great deal of parent support	Administration's behavior is supportive, encouraging	Principal enforces school rules, backs me up	I try to coordinate course content with other teachers	Teachers are evaluated fairly	Principal makes expectations for staff clear	Principal does poor job of getting resources	Paperwork, routine duties interfere with my teaching	Some school rules conflict with my professional judgment	Doing my best is sometimes a waste of time
						1993–94					
Total	0.44	0.38	0.41	0.40	0.25	0.22	0.30	0.21	0.38	0.34	0.41
School level											
Elementary	0.69	0.60	0.63	0.60	0.37	0.36	0.52	0.42	0.57	0.56	0.52
Middle	1.03	1.13	0.74	0.87	0.69	0.63	0.70	0.81	0.94	0.96	1.05
Secondary	0.54	0.53	0.38	0.36	0.20	0.31	0.31	0.41	0.29	0.40	0.39
Combined/ungraded only	1.30	1.09	1.11	1.10	0.69	0.74	0.69	1.01	1.04	0.82	1.44
Middle school grade configuration											
Grades 6–8	1.63	1.38	1.06	1.34	1.04	0.90	0.93	1.17	1.33	1.42	1.41
Grades 7–8	1.47	1.41	1.23	0.94	0.90	0.61	0.83	0.94	0.93	1.18	1.00
Other middle	2.45	2.61	2.60	2.89	1.71	1.59	2.14	2.01	2.49	2.32	2.50
Secondary school grade configuration											
Grades 7–9	1.78	1.41	1.38	1.22	1.13	0.83	1.09	1.22	1.00	1.19	1.40
Other secondary	0.53	0.55	0.40	0.39	0.30	0.33	0.32	0.37	0.29	0.42	0.43

Table A27—Standard errors for table 27: Percentage of public school teachers who agreed with various statements about their schools, by school level and grade configuration: 1993–94 and 1987–88*—Continued

School characteristics	Teachers participate in important educational decisions	I receive a great deal of parent support	Administration's behavior is supportive, encouraging	Principal enforces school rules, backs me up	I try to coordinate course content with other teachers	Teachers are evaluated fairly	Principal makes expectations for staff clear	Principal does poor job of getting resources	Paperwork, routine duties interfere with my teaching	Some school rules conflict with my professional judgment	Doing my best is sometimes a waste of time
						1987–88					
Total	0.35	0.29	0.28	0.23	0.21	0.25	0.20	0.25	0.31	0.22	0.32
School level											
Elementary	0.50	0.48	0.37	0.40	0.31	0.36	0.28	0.43	0.49	0.39	0.49
Middle	1.07	1.04	0.91	0.78	0.62	0.85	0.59	0.71	0.76	0.69	0.77
Secondary	0.59	0.54	0.52	0.41	0.44	0.33	0.40	0.35	0.37	0.46	0.44
Combined/ungraded only	1.06	1.10	1.08	0.81	0.63	0.69	0.80	0.80	0.97	1.00	0.85
Middle school grade configuration											
Grades 6–8	1.57	1.36	1.23	1.21	0.98	0.99	1.01	1.23	1.02	1.00	1.10
Grades 7–8	1.45	1.75	1.73	1.24	1.22	1.18	1.11	1.11	1.16	1.52	1.51
Other middle	2.48	2.61	2.45	1.99	1.19	2.07	1.41	1.56	2.36	2.31	2.29
Secondary school grade configuration											
Grades 7–9	1.86	1.99	1.43	1.08	1.28	0.80	0.88	1.06	1.07	1.14	1.57
Other secondary	0.61	0.52	0.56	0.44	0.49	0.37	0.44	0.37	0.37	0.50	0.46

*Only one of the column variables was included in the 1990–91 questionnaire, so data from that year are not shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88 and 1993–94.

Table A28—Standard errors for table 28: Percentage of public school teachers who were satisfied with particular aspects of their teaching job, by school level and grade configuration: 1994–95, 1991–92, and 1988–89

School characteristics	Overall job satisfaction	Teaching load	Availability of resources/ materials/ equipment	Recognition and support from administrators	Intellectual challenge	Influence over policy, practices	Caliber of colleagues	Professional prestige	Salary	Opportunity for advancement
					1994–95					
Total	0.93	1.22	1.41	1.30	0.74	1.27	0.96	1.49	1.17	1.05
School level										
Elementary	1.58	1.93	2.07	2.18	1.11	1.91	1.43	2.11	2.16	1.44
Middle	2.89	3.88	3.62	3.12	2.64	3.30	3.00	3.01	3.18	3.34
Secondary	1.60	1.63	1.94	1.98	1.74	2.32	1.74	2.39	2.23	2.04
Combined/ungraded only	5.22	6.76	5.88	5.24	5.93	6.62	3.78	5.56	6.48	6.15
Middle school grade configuration										
Grades 6–8	3.98	4.54	4.79	4.11	3.52	3.87	4.04	4.84	4.29	3.68
Grades 7–8	4.83	5.26	5.40	5.92	5.09	7.22	4.39	6.59	7.20	6.74
Other middle	6.55	10.95	9.20	7.97	5.90	9.39	4.89	9.16	7.92	9.89
Secondary school grade configuration										
Grades 7–9	7.84	6.98	7.98	10.93	5.95	9.94	6.61	9.41	9.82	8.81
Other secondary	1.60	1.80	2.00	1.81	1.77	2.21	1.75	2.51	2.29	2.15
					1991–92					
Total	0.87	1.23	1.14	1.44	0.88	1.22	0.89	1.39	1.49	1.20
School level										
Elementary	1.53	1.62	1.80	1.99	1.22	1.76	1.32	1.66	2.00	1.48
Middle	2.36	3.52	3.55	3.41	2.60	3.91	2.01	3.21	3.28	2.80
Secondary	1.92	1.91	2.20	2.23	1.98	2.37	1.86	2.22	2.59	2.49
Combined/ungraded only	5.84	6.23	6.74	5.08	5.10	5.18	4.90	6.59	6.36	7.67
Middle school grade configuration										
Grades 6–8	3.63	5.07	3.80	4.15	3.50	4.41	2.78	4.46	4.47	3.83
Grades 7–8	5.78	6.89	9.20	6.11	3.99	6.60	3.31	7.69	8.54	6.70
Other middle	6.00	8.73	6.89	8.49	7.58	12.52	5.58	9.80	10.26	7.26
Secondary school grade configuration										
Grades 7–9	6.28	6.18	7.52	6.41	5.97	6.66	6.47	5.61	6.53	7.07
Other secondary	2.00	2.07	2.27	2.39	2.14	2.59	2.08	2.20	2.58	2.61

Table A28—Standard errors for table 28: Percentage of public school teachers who were satisfied with particular aspects of their teaching job, by school level and grade configuration: 1994–95, 1991–92, and 1988–89—Continued

School characteristics	Overall job satisfaction	Teaching load	Availability of resources/ materials/ equipment	Recognition and support from administrators	Intellectual challenge	Influence over policy, practices	Caliber of colleagues	Professional prestige	Salary	Opportunity for advancement
					1988–89					
Total	(*)	1.10	1.41	1.45	1.01	0.93	1.11	(*)	1.48	(*)
School level										
Elementary	(*)	1.83	1.47	1.89	1.53	1.97	1.43	(*)	2.02	(*)
Middle	(*)	4.07	3.82	4.28	3.28	3.71	3.03	(*)	3.88	(*)
Secondary	(*)	2.36	3.27	2.19	1.34	1.52	2.27	(*)	2.50	(*)
Combined/ungraded only	(*)	4.98	6.18	5.77	5.75	5.37	6.10	(*)	5.42	(*)
Middle school grade configuration										
Grades 6–8	(*)	5.80	4.97	4.69	4.23	5.10	4.14	(*)	5.22	(*)
Grades 7–8	(*)	7.30	5.40	9.07	6.98	6.84	5.56	(*)	5.84	(*)
Other middle	(*)	13.22	13.04	13.15	8.94	10.16	5.30	(*)	12.49	(*)
Secondary school grade configuration										
Grades 7–9	(*)	9.61	8.61	6.72	7.49	7.97	0.73	(*)	9.70	(*)
Other secondary	(*)	2.28	3.63	2.43	1.48	1.80	2.35	(*)	2.58	(*)

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey: 1988–89, 1991–92, and 1994–95.

Table A29—Standard errors for table 29: Percentage of public school teachers who rated various problems in their schools as serious, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Student apathy	Students arrive unprepared to learn	Lack of academic challenge	Absenteeism	Student disrespect for teachers	Poverty	Lack of parent involvement	Physical conflicts among students	Robbery or theft	Student alcohol use
					1993–94					
Total	0.35	0.39	0.17	0.29	0.40	0.52	0.40	0.20	0.17	0.17
School level										
Elementary	0.40	0.60	0.21	0.41	0.50	0.81	0.61	0.42	0.25	0.09
Middle	1.31	1.30	0.63	0.69	1.14	1.11	1.25	0.80	0.61	0.38
Secondary	0.48	0.51	0.24	0.67	0.41	0.42	0.76	0.33	0.22	0.42
Combined/ungraded only	1.20	1.21	0.63	0.83	1.19	1.63	1.41	0.73	0.40	1.29
Middle school grade configuration										
Grades 6–8	1.64	1.71	0.87	0.96	1.59	1.54	1.61	1.18	0.80	0.54
Grades 7–8	1.19	1.42	0.71	1.02	1.06	1.43	1.40	0.96	0.59	0.54
Other middle	3.00	2.77	1.44	1.43	2.37	2.16	2.68	1.74	0.99	0.95
Secondary school grade configuration										
Grades 7–9	1.34	1.60	0.82	1.45	1.20	1.21	1.80	1.14	0.69	0.78
Other secondary	0.47	0.50	0.20	0.69	0.48	0.47	0.78	0.41	0.23	0.45
					1990–91					
Total	(*)	(*)	(*)	0.29	(*)	(*)	(*)	0.23	0.13	0.16
School level										
Elementary	(*)	(*)	(*)	0.29	(*)	(*)	(*)	0.33	0.20	0.11
Middle	(*)	(*)	(*)	0.94	(*)	(*)	(*)	0.97	0.54	0.40
Secondary	(*)	(*)	(*)	0.75	(*)	(*)	(*)	0.22	0.18	0.34
Combined/ungraded only	(*)	(*)	(*)	1.15	(*)	(*)	(*)	1.20	0.39	0.99
Middle school grade configuration										
Grades 6–8	(*)	(*)	(*)	1.24	(*)	(*)	(*)	1.21	0.69	0.52
Grades 7–8	(*)	(*)	(*)	1.60	(*)	(*)	(*)	1.29	0.82	0.69
Other middle	(*)	(*)	(*)	1.32	(*)	(*)	(*)	2.54	1.80	1.08
Secondary school grade configuration										
Grades 7–9	(*)	(*)	(*)	2.11	(*)	(*)	(*)	1.04	0.65	0.93
Other secondary	(*)	(*)	(*)	0.80	(*)	(*)	(*)	0.24	0.19	0.40

Table A29—Standard errors for table 29: Percentage of public school teachers who rated various problems in their schools as serious, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Student apathy	Students arrive unprepared to learn	Lack of academic challenge	Absenteeism	Student disrespect for teachers	Poverty	Lack of parent involvement	Physical conflicts among students	Robbery or theft	Student alcohol use
					1987–88					
Total	(*)	(*)	(*)	0.23	(*)	(*)	(*)	0.18	0.12	0.18
School level										
Elementary	(*)	(*)	(*)	0.29	(*)	(*)	(*)	0.28	0.18	0.18
Middle	(*)	(*)	(*)	0.73	(*)	(*)	(*)	0.60	0.37	0.37
Secondary	(*)	(*)	(*)	0.56	(*)	(*)	(*)	0.32	0.28	0.42
Combined/ungraded only	(*)	(*)	(*)	0.77	(*)	(*)	(*)	0.53	0.54	0.93
Middle school grade configuration										
Grades 6–8	(*)	(*)	(*)	1.07	(*)	(*)	(*)	0.73	0.46	0.50
Grades 7–8	(*)	(*)	(*)	1.27	(*)	(*)	(*)	1.28	0.60	1.10
Other middle	(*)	(*)	(*)	1.41	(*)	(*)	(*)	1.60	0.87	1.24
Secondary school grade configuration										
Grades 7–9	(*)	(*)	(*)	1.27	(*)	(*)	(*)	0.70	0.42	0.96
Other secondary	(*)	(*)	(*)	0.66	(*)	(*)	(*)	0.33	0.31	0.45

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Teacher Questionnaires): 1987–88, 1990–91, and 1993–94.

Table A30—Standard errors for table 30: Percentage of public school principals who rated various problems in their schools as serious, by school level and grade configuration: 1993–94, 1990–91, and 1987–88

School characteristics	Student apathy	Students arrive unprepared to learn	Lack of academic challenge	Absenteeism	Student disrespect for teachers	Poverty	Lack of parent involvement	Physical conflicts among students	Robbery or theft	Student alcohol use
					1993–94					
Total	0.31	0.42	0.16	0.23	0.22	0.55	0.41	0.20	0.09	0.12
School level										
Elementary	0.33	0.57	0.19	0.28	0.30	0.81	0.60	0.25	0.17	0.01
Middle	1.34	1.28	0.61	0.76	0.81	1.42	1.40	0.90	0.10	0.22
Secondary	0.62	0.55	0.33	0.54	0.37	0.66	0.73	0.28	0.12	0.54
Combined/ungraded only	1.28	1.22	0.54	1.00	1.00	2.01	1.43	0.74	0.26	0.90
Middle school grade configuration										
Grades 6–8	1.81	1.89	1.09	1.07	1.28	2.21	2.18	1.12	0.16	0.22
Grades 7–8	1.30	1.57	0.84	0.80	0.64	1.71	2.30	0.56	0.31	0.70
Other middle	3.41	1.61	0.71	1.33	1.09	2.54	2.23	2.53	—	—
Secondary school grade configuration										
Grades 7–9	1.81	1.56	1.67	1.00	1.22	1.84	2.13	1.47	0.62	0.55
Other secondary	0.64	0.60	0.41	0.59	0.38	0.67	0.76	0.30	0.12	0.58
					1990–91					
Total	0.40	(*)	0.23	0.30	0.26	0.49	0.37	0.23	0.14	0.24
School level										
Elementary	0.41	(*)	0.28	0.43	0.31	0.74	0.52	0.20	0.21	0.16
Middle	1.21	(*)	0.77	0.84	0.89	1.05	1.51	1.15	0.20	0.32
Secondary	0.78	(*)	0.40	0.86	0.30	0.74	0.86	0.20	0.17	1.00
Combined/ungraded only	1.61	(*)	1.20	1.22	0.81	1.41	1.89	0.65	0.28	1.09
Middle school grade configuration										
Grades 6–8	1.51	(*)	1.21	1.21	1.04	1.47	1.94	0.82	0.21	0.40
Grades 7–8	2.02	(*)	1.41	1.62	1.91	2.03	2.39	1.21	0.63	1.27
Other middle	2.31	(*)	1.10	—	1.38	4.51	2.88	4.39	—	1.20
Secondary school grade configuration										
Grades 7–9	2.99	(*)	1.61	1.80	1.16	2.54	2.88	0.40	—	1.29
Other secondary	0.80	(*)	0.41	0.89	0.32	0.76	0.98	0.22	0.19	1.11

Table A30—Standard errors for table 30: Percentage of public school principals who rated various problems in their schools as serious, by school level and grade configuration: 1993–94, 1990–91, and 1987–88—Continued

School characteristics	Student apathy	Students arrive unprepared to learn	Lack of academic challenge	Absenteeism	Student disrespect for teachers	Poverty	Lack of parent involvement	Physical conflicts among students	Robbery or theft	Student alcohol use
					1987–88					
Total	(*)	(*)	(*)	0.27	(*)	(*)	(*)	0.21	0.09	0.20
School level										
Elementary	(*)	(*)	(*)	0.35	(*)	(*)	(*)	0.30	0.11	0.11
Middle	(*)	(*)	(*)	0.61	(*)	(*)	(*)	0.64	0.27	0.49
Secondary	(*)	(*)	(*)	0.75	(*)	(*)	(*)	0.27	0.15	0.83
Combined/ungraded only	(*)	(*)	(*)	1.55	(*)	(*)	(*)	0.61	0.59	0.91
Middle school grade configuration										
Grades 6–8	(*)	(*)	(*)	0.91	(*)	(*)	(*)	0.80	0.49	0.51
Grades 7–8	(*)	(*)	(*)	1.02	(*)	(*)	(*)	1.02	—	1.44
Other middle	(*)	(*)	(*)	1.38	(*)	(*)	(*)	1.74	—	—
Secondary school grade configuration										
Grades 7–9	(*)	(*)	(*)	1.77	(*)	(*)	(*)	0.97	0.52	0.89
Other secondary	(*)	(*)	(*)	0.87	(*)	(*)	(*)	0.26	0.16	0.93

—Too few sample observations for a reliable estimate.

*Data not collected for these variables in that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (Public School and Public School Principal Questionnaires): 1987–88, 1990–91, and 1993–94.

Appendix C—Technical Notes

Data from two surveys were analyzed for this report, the Schools and Staffing Survey (SASS), and the Teacher Follow-up Survey (TFS). The emphasis in this report, as well as in this appendix, is on the most recent data available from each of these surveys, the 1993–94 SASS and 1994–95 TFS data. However, the report also includes some discussion of trends using earlier SASS and TFS surveys. Technical information about the 1987–88 and 1990–91 SASS and 1988–89 and 1991–92 TFS can be found in previous publications and on the SASS Web site (http://nces.ed.gov/surveys/sass/).[24]

The Schools and Staffing Survey

The 1993–94 Schools and Staffing Survey (SASS:93–94) is a nationally representative survey that collected public- and private-sector data on the nation's elementary and secondary schools, teachers, principals, and their school districts. (Note that data from the public sector only are analyzed in this report.) The SASS:93–94 data are the most comprehensive nationally oriented data available, with information on numbers of schools, teachers, and students; programs and services that schools provide; decision-making and influence; staff qualifications and staffing matters; and a range of school climate topics; as well as other topics not examined in this report.

Sample Design

The 1993–94 SASS was the third in a series of cross-sectional surveys, following ones in 1990–91 and 1987–88. The public school survey consisted of four sets of linked questionnaires, including surveys of schools, principals of the selected schools, a subsample of teachers within

[24]See the technical appendices in the statistical profile reports for the earlier two SASS data sets for more detailed information (Choy, Henke, Alt, and Medrich 1993 [NCES 93–146] for information on SASS 1990–91; and Choy, Medrich, and Henke 1992 [NCES 92–120] for information on SASS 1987–88. See the technical appendices in Bobbitt 1991 (NCES 91–128) and Bobbitt 1994 (NCES 94–337) for more detailed information about the earlier TFS data sets. For complete details, see the user's manuals for these data sets: Gruber, Rohr, and Fondelier 1996 (the *1993–94 Schools and Staffing Survey Data File User's Manual*, volume I, NCES 96–142), Gruber 1994 (the *1990–91 SASS Data File User's Manual*, NCES 93–144-I), and Broene 1991 (the *1987–88 SASS Data File User's Manual* on public school data, NCES 91–136); and Whitener, Gruber, Rohr, and Fondelier 1998 (the *1994–95 Teacher Followup Survey Data File User's Manual*, NCES 98–232), Whitener, Kaufman, Rohr, Bynum, and King 1994 (the *1991–92 TFS Data File User's Manual*, NCES 94–331), and Faupel, Bobbitt, and Friedrichs 1992 (the *1988–89 TFS Data File User's Manual*, NCES 92–058).

each school, and public school districts. Schools were sampled first, and the sample[25] was stratified by sector, state, and school level. Each selected school received a school questionnaire and an administrator questionnaire. Within each school, a sample of teachers was selected and each one received a teacher questionnaire. A Teacher Demand and Shortage Questionnaire for Public School Districts was sent to each local education agency (LEA), or school district, that had at least one school selected for the school sample.

The primary public school frame for the 1993–94 SASS was the 1991–92 school year Common Core of Data (CCD) data file, believed to be the most complete public school listing available. The CCD is based on administrative records collected annually by NCES from all state education agencies, which work with NCES to assure comparability between data elements reported. For the 1991–92 school year, state education agencies reported data for a total of 86,287 schools. The CCD frame includes regular public schools and Department of Defense schools. Nonregular schools such as special education, vocational or technical schools are also included in the sample frame. Before sampling, duplicate schools and schools outside of the United States were removed from the frame. Schools that teach only prekindergarten, kindergarten, or adult education were also removed, leaving a total of 82,746 schools on the 1991–92 public school frame.[26]

Data Collection Procedures

The data were collected for the National Center for Education Statistics (NCES) by the U.S. Bureau of the Census. Questionnaires were mailed to school districts and administrators in December 1993 and to schools and teachers in January and February 1994. Six weeks later, a second questionnaire was sent to each nonrespondent. Telephone followup of nonrespondents was conducted between March and June.

Weighting[27]

Weights of the sample units were developed to produce national and state estimates for public schools, teachers, administrators, and LEAs. The basic weights were the inverse of the probability of selection, and they were adjusted for nonresponse and to adjust the sample totals (based on responding, nonresponding, and out-of-scope cases) to the frame totals in order to re-

[25]For a detailed description of the sample design and the differences between the designs in 1990–91 and 1993–94, see Abramson, Cole, Jackson, Parmer, and Kaufman 1996.

[26]In addition, the private school sample was drawn from the 1991–92 Private School Survey (PSS), updated with 1992–93 association lists. (Private schools were not included in this report.)

[27]For a detailed description of the weighting processes, see Abramson, Cole, Jackson, Parmer, and Kaufman 1996 (NCES 96–089), 69–89.

duce sampling variability. For teachers, the weight adjusted the estimated number of teachers on the school file to match the teacher count on the teacher file.

Response Rates

The weighted response rate for public schools in SASS 1993–94 was 92.3 percent. The overall weighted response rate for public school principals (taking into account nonresponse to the School Questionnaire) was 96.6 percent. The overall weighted response rate for public school teachers (taking into account both nonresponse to the Teacher Listing Form and to the School Questionnaire) was 83.8 percent. In the public school teacher survey, 91 percent of the items had a response rate of 90 percent or more. None of the items used in this report had a response rate of less than 80 percent. Values were imputed for questionnaire items that should have been answered but were not (Abramson, Cole, Jackson, Parmer, and Kaufman 1996), using one of three methods: 1) using data from other items on the questionnaire or a related component of the SASS (a school record to impute district data, for example); 2) extracting data from the sampling frame file (the Common Core of Data or Private School Survey); or 3) extracting data from a respondent with similar characteristics.[28] The samples used for the 1993–94 analyses in this report consisted of 8,767 public schools, 9,098 public school principals, and 47,105 public school teachers.

Changes in the SASS Design from 1990–91 to 1993–94

After an evaluation of the 1990–91 SASS, several changes were made in the 1993–94 SASS. Changes made to the SASS sample design between 1987–88 and 1990–91 may affect comparisons between 1987–88 and subsequent years of SASS data. These changes included:

- The source for the public school sampling frame was switched from QED[29] to CCD, resulting in a different definition of "school."
- The estimated number of teachers from the teacher file was adjusted to the estimated number of teachers from the school file.

Additional changes included the following.

- Schools in the Bureau of Indian Affairs stratum were selected with certainty.
- The cutoff for defining Native American schools was changed to a Native American/Alaskan Native enrollment greater than 19.5 percent, from 25 percent.

[28]For a detailed description of the imputation procedures, see Abramson, Cole, Jackson, Parmer, and Kaufman 1996 (NCES 96–089).

[29]QED refers to a list of all the nation's public and private parochial and nonparochial schools compiled by Quality Education Data, Inc., of Denver.

- Collapsing criteria were altered slightly for the LEA weighting.
- Administrators who also taught were eligible for the teacher sample and so could receive a teacher questionnaire if sampled as a teacher, in addition to an administrator questionnaire.
- Computer-assisted telephone interview (CATI) instruments were used extensively for the nonresponse follow-up of the teacher survey, public school survey, and administrator survey (among others not used in this report).

These changes are discussed in more detail in other NCES documents.[30]

The Teacher Followup Survey

The 1994–95 Teacher Follow-up Survey (TFS) was sponsored by the National Center for Education Statistics (NCES) of the U.S. Department of Education to update information on teacher attrition and career patterns. The U.S. Bureau of the Census collected and processed the data. The TFS is a survey of elementary and secondary school teachers who participated in the Schools and Staffing Survey (SASS)[31] and is conducted in the school year following the SASS data collection. The sample for the 1994–95 TFS was selected from those teachers who participated in the 1993–94 SASS; it consisted of all who left teaching within the year after SASS was administered and a subsample of those who continued teaching.

The TFS provides data on teacher attrition rates, characteristics of those who stay in the teaching profession and those who leave, occupations or other activities for those who leave teaching and career information for those who are still teaching, and attitudes about the teaching profession and job satisfaction.

Sample Design

The 1994–95 TFS is a survey of approximately 7,200 teachers interviewed in the 1993–94 SASS Teacher Survey. As described earlier, the purpose of the 1994–95 TFS was to measure teacher attrition rates one year after the 1993–94 SASS data collection. In SASS, schools were selected first. Next, teachers were selected within each sampled school. TFS teachers were selected from teachers who responded to the SASS. The TFS sample is a stratified sample that was allocated to allow comparisons of stayers, movers, and leavers within sector (public/private), teachers with different amounts of experience, and grade levels taught.

[30]For a detailed description of the sample design and the differences between the designs for different SASS administrations, see Kaufman and Huang 1993 (NCES 93-449); and Abramson, Cole, Jackson, Parmer, and Kaufman 1996 (NCES 96-089).

[31]For a complete description of the 1993–94 Schools and Staffing Survey, see Gruber, Rohr, and Fondelier 1996 (NCES 96-142-I).

Within each public TFS stratum, teachers who responded to the 1993–94 SASS Teacher Survey were sorted by teachers' main assignment field, Census region, urbanicity, school enrollment, and SASS teacher control number. After they were sorted, teachers were selected within each stratum using a probability proportional to size sampling procedure.

Response Rates

TFS weighted survey response rates for current and former teachers are summarized below. The cumulative overall response rates take into account the SASS response rates as well. (Note that the TFS sample is a subset of the SASS respondents.) The cumulative overall response rates were 80 percent for 1994–95 current teachers and 74.7 percent for former teachers. The cumulative overall response rates are calculated as follows: (SASS Teacher List response rate) x (SASS Teacher Survey response rate) x (TFS Teacher response rate).

TFS current teachers:	(.95) (.882)(.925)(100)=80.0.
TFS former teachers:	(.95)(.882)(.892)(100)=74.7.

Variable Definitions

Variable consistency. In tables where data points from different years are presented, questionnaire items have been checked for comparability. If items varied in any substantive way over time (wording, response categories, or the subgroup that was asked the question), only those from the most recent year available, or from years when they were consistent, are included.

Numbers of unweighted cases. In the tables that rely on data reported by teachers or principals as well as schools, the total number of cases (or unweighted N's) in the total row is slightly more than the sum of N's in the detail rows, which rely on school data as well. The difference is caused by some teachers and some principals responding to the survey while their schools did not complete a school survey.

Public School Districts

A public school district (or LEA) was defined as a government agency that had administrative responsibility for providing public elementary and/or secondary instruction and educational support services. The agency or administrative unit was required to operate under a public board of education. Districts that did not operate schools but that hired teachers were included. A district was considered out of scope if it did not employ elementary or secondary teachers of any kind, including special education and itinerant teachers.

Public Schools

A public school was defined as an institution that provides educational services for at least one of grades 1–12 (or comparable ungraded classes), has one or more teachers to provide instruction, is located in one or more buildings, receives public funds as primary support, has an assigned administrator, and is operated by an education agency. Schools in juvenile detention centers and schools located on military bases and operated by the U.S. Department of Defense were included.

School Level and Grade Configuration

Schools were classified for this report as elementary, middle, secondary, or combined on the basis of the grades they included, and principals and teachers were classified according to the level of the school at which they worked. Schools were defined according to the following grade ranges:

Elementary	Schools with at least one grade lower than 5 and no grade higher than 8.
Middle	Schools with no grade lower than 5 and no grade higher than 8.
Secondary	Schools with no grade lower than 7 and at least one grade higher than 8.
Combined	Schools with at least one grade lower than 7 and at least one grade higher than 8. Schools with only ungraded classes (no grades reported in K–12) were included with combined schools.

Grade configurations of 6–8 and 7–8 for the detailed subsets of middle schools, and of 7–9 for secondary schools, were selected because they were the groups with the largest number of schools. In both middle and secondary school detail rows, an "other" category was used to encompass all residual grade ranges. All grade ranges other than the ones specified in the detail rows are included in "other"; for example, schools with grades 5–8 are one of the subsets included in the "other" row for middle schools.

Teachers

For the purposes of SASS, a teacher was any full- or part-time teacher whose primary assignment was to teach in any of grades K–12. Part-time teachers were those who reported working less than full time as a teacher at their school. Itinerant teachers and long-term substitutes who were filling the role of a regular teacher on an indefinite basis were also included. An itinerant teacher was defined as a teacher who taught at more than one school. Beginning in 1993–94, anyone in the school who taught grades K–12 but whose primary assignment was something else (e.g., a principal) was also defined to be a teacher. The following individuals were not considered

teachers: short-term substitutes, student teachers, nonteaching specialists (such as guidance counselors, librarians, nurses, or psychologists), administrators, teacher aides, or other professional or support staff.

Leavers. Leavers are teachers who left the teaching profession in the year of the TFS, one year after the SASS was administered.

Movers. Movers are teachers who were still teaching in the year of the TFS but had moved to a different school than the one they taught at in the previous school year.

Stayers. Stayers are teachers who were teaching in the same school in the TFS school year as they were in the SASS school year.

Average Class Size

Average class size was calculated by averaging across teachers each teacher's reported class sizes (either one for self-contained classes or the number that were reported for departmentalized classes). The following restrictions were used in the computation:

- For self-contained classes, data from teachers in elementary and combined schools only were included in calculations, and only if their primary assignment field was not special education. (Special education classes tend to be much smaller than other classes.)
- For departmentalized classes, data from teachers in middle, secondary, and combined schools only were included.
- Teachers with elementary enrichment or pull-out classes were excluded from the class size calculations.

Community Type

Community type was derived from the seven-category "urbanicity" (locale) code developed by Johnson.[32] The locale code was based on the school's mailing address, which was used to link to Bureau of the Census data files containing population density data, Standard Metropolitan Statistical Area (SMSA) codes, and a Census code defining urban and rural areas. This variable is believed to provide a more accurate characterization than the respondent's report of community type that was originally collected in the 1987–88 SASS and 1989–90 TFS. (Since those data files were first released, the same method was used to create a comparable urbanicity variable for schools, which is what was used here for 1987–88 SASS and 1989–90 TFS data. Thus all three

[32]Johnson 1994 and Johnson 1989.

years of data in each of these data sets use the same urbanicity variable.) For this report, the locale codes were aggregated into the three community types described below.

Central City

A large central city (a central city of an SMSA with population of at least 400,000 or a population density of at least 6,000 per square mile), or a mid-size central city (a central city of an SMSA, but not designated as a large central city).

Urban Fringe/Large Town

Urban fringe of a large or mid-size city (a place within an SMSA of a large or mid-size central city and defined as urban by the U.S. Bureau of the Census) or a large town (a place not within an SMSA, but with a population greater than or equal to 25,000 and defined as urban by the U.S. Bureau of the Census).

Rural/Small Town

Rural area (a place with a population of less than 2,500 and defined as rural by the U.S. Bureau of the Census) or a small town (a place not within an SMSA, with a population of less than 25,000, but greater than or equal to 2,500, and defined as urban by the U.S. Bureau of the Census).

Minority Enrollment

Two categories for a school's minority enrollment proportion were used in the tables: fewer than 20 percent and 20 percent or more. Included in the minority category were American Indian or Alaskan Native; Asian or Pacific Islander; Hispanic, regardless of race (Mexican, Puerto Rican, Cuban, Central or South American, or other culture or origin); and Black (non-Hispanic) students.

School Size

Size categories were based on the number of students (head count) who were enrolled in grades K–12 in the school on or about October 1, 1993 (as reported on the School Questionnaire). School size categories were: fewer than 150 students, 150 to 499, 500 to 749, and 750 or more.

Region

Northeast

The Northeast encompassed these states: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.

Midwest

The Midwest encompassed these states: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

South

The South encompassed these states: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

West

The West encompassed these states: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

District Size

Size categories were based on the number of students (head counts) who were enrolled in the district on or about October 1 of the survey year (as reported on the Teacher Demand and Shortage Questionnaire). District size categories were: fewer than 1,000; 1,000 to 9,999; and 10,000 or more.

Minority Teachers

Minority teachers were those with one of the following racial or ethnic backgrounds: American Indian or Alaska Native; Asian or Pacific Islander; Hispanic, regardless of race (Mexican, Puerto Rican, Cuban, Central or South American, or other Hispanic culture or origin); or Black, not of Hispanic origin.

The two categories for proportion of all teachers in the school (or district) who belonged to a minority group were: Fewer than 10 percent, and 10 percent or more.

Standard Errors

The estimates in the tables in this report are based on samples and are subject to sampling variability. If all possible samples of the same size were surveyed under the same conditions, an interval of 1.96 standard errors below to 1.96 standard errors above a sample statistic would include the population value in approximately 95 percent of the cases. Note, however, that the standard errors do not take into account the effects of bias due to item nonresponse, measurement error, data processing error, or other possible systematic error. Standard errors for all tables are shown in appendix B. The standard errors, which indicate the accuracy of the estimates, were estimated using the REPTAB program developed by MPR Associates. The program uses a Balanced Repeated Replications method to calculate standard errors taking into account the complex sample design. (The standard errors reported are generally higher than standard errors calculated under the assumptions of simple random sampling.)

Accuracy of Estimates

The accuracy of any statistic is determined by the joint effects of nonsampling and sampling errors. Both types of error affect the estimates presented in this report.[33]

Nonsampling error. Both universe and sample surveys are subject to nonsampling errors, which are difficult to estimate. Nonsampling errors are of two kinds—nonobservation error and measurement error.

Nonobservation error may be due to noncoverage, which occurs when members of the population of interest are excluded from the sampling frame, and therefore are not included in the survey sample. Nonobservation error also occurs when sampled units (for example, schools, teachers, or students) refuse to answer some or all of the survey questions. These types of errors are referred to as questionnaire or unit nonresponse (where the entire questionnaire is missing) and item nonresponse (where only some items of the questionnaire are missing). Weighting procedures (for units) and imputation procedures (for items) were used to compensate for nonresponse.

Measurement error occurs when mistakes are made during data editing, coding, or entry into computers (processing errors), when the responses that participants provide differ from the "true" responses (response errors), and when measurement instruments such as tests or questionnaires fail to measure the characteristics they are intended to measure. Sources of response errors

[33]See Kalton, Winglee, Krawchuck, and Levine 2000 and Gruber 1994 for detailed information about the quality of the SASS data.

include differences in the ways that respondents interpret questions, faulty respondent memory, and mistakes that respondents make when recording their answers. Because estimating the magnitude of these various types of nonsampling errors would require special experiments, access to independent data, or re-interviewing of respondents, information on the magnitude of such error is seldom available.

Sampling error. Sampling error occurs when members of a population are selected (sampled), and only sample members respond to survey questions. Estimates that are based on a sample will differ somewhat from the data that would have been obtained if a complete census of the relevant population had been taken using the same survey instruments, instructions, and procedures. The estimated standard error of a statistic is a measure of the variation due to sampling and can be used to examine the precision obtained in a particular sample.

Some of the estimates shown in the tables of this report may have large standard errors. For example, cells with small sample sizes tend to have large standard errors. Therefore, numbers that are in the tables but are not discussed in the text should be interpreted with caution. Moreover, apparent differences between numbers that are not discussed may not be statistically significant.

Statistical Procedures

Comparisons made in the text have been tested for statistical significance to ensure that the differences are larger than might be expected due to sampling variation. The first of these statistical tests is the Student's *t* statistic. Generally, whether a difference is considered statistically significant is determined by calculating a *t* value for the difference between a pair of proportions, or means, and comparing this value to published tables of values at certain critical levels, called alpha levels. The alpha level is an *a priori* statement of the probability of inferring that a difference exists when, in fact, it does not. The alpha level used in this report is .05; differences discussed in the text have been tested using this level.

In order to make proper inferences and interpretations from the statistics, several points must be kept in mind. First, comparisons resulting in large *t* statistics may appear to merit special note. However, this is not always the case, because the size of the *t* statistic depends not only on the observed differences in means or the percentages being compared, but also on the standard error of the difference. Thus, a small difference between two groups with a much smaller standard error could result in a large *t* statistic, but this small difference is not necessarily noteworthy. Second, when multiple statistical comparisons are made within one category of data, it becomes increasingly likely that a finding of a statistically significant difference is erroneous. Even when

there is no difference in the population, at an alpha level of .05, there is still a 5 percent chance of concluding that an observed *t* value representing one comparison in the sample is large enough to be statistically significant. As the number of comparisons increases, so does the risk of making such an error in inference.

To guard against errors of inference based upon multiple comparisons, the Bonferroni procedure to correct significance tests for multiple contrasts was used. This method corrects the significance (or alpha) level for the total number of contrasts made with a particular classification variable. For each classification variable, there are K possible contrasts (or nonredundant pairwise comparisons), where K=(N*(N–1)/2) and N is the number of categories in the variable. For example, because school size has 4 categories, N=4; and there are (4*3)/2=6 possible comparisons among the categories. The Bonferroni procedure divides the alpha level for a single *t* test (for example, .05) by the number of possible pairwise comparisons in order to provide a new alpha that adjusts for the possible multiple comparisons.

The formula used to compute the *t* statistic is:

$$t = \frac{E_1 - E_2}{\sqrt{(se_1)^2 + (se_2)^2}}$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. This formula is valid only for independent estimates. When the estimates are not independent (for example, when comparing any estimates that constitute a percentage distribution), a covariance term must be added to the denominator of the *t*-test formula. Because the actual covariance terms were not known, it was assumed that the estimates were perfectly negatively correlated. Consequently, $2*(se_1*se_2)$ was added to the denominator of the *t*-test formula for nonindependent estimates.

Standard errors for all tables are presented in appendix B. The standard errors were calculated using the REPTAB program developed by MPR Associates, Inc., which uses a Balanced Repeated Replications method to calculate standard errors based upon complex survey designs. A version of this program is available from NCES upon request. The standard errors reported take into account the complex sample design; they are generally higher than standard errors calculated under the assumptions of simple random sampling.

Other Statistical Tests

Some comparisons across categories of an ordered variable with three or more categories were tested for statistical significance with either a linear trend or an ANOVA (analysis of vari-

ance) test, rather than a series of *t* tests between pairs of categories. In other instances, an ANOVA test (using orthogonal contrasts) was used to examine differences among categories of an independent variable, particularly when sample sizes were small (for example, in the tables using Teacher Follow-up Survey data).

Linear trend test. When possible differences were examined among estimates from a variable with ordered categories, the Student's *t*-test was applied to a measure of linear trend. Based on a simple linear regression, with an ordered variable serving as the independent variable (e.g., school level), and the proportions compared serving as the dependent variable (e.g., the percentage of schools providing bilingual programs), the test involves computing the weighted regression coefficient (*b*) and its corresponding standard error (s.e.). The estimates are weighted by the inverse of their respective standard errors. The ratio of these two (*b*/s.e.) is the test statistic *t*. If *t* is greater than 1.96, the critical value for one comparison at the .05 alpha level, there is evidence of a linear relationship between the two variables, school level and provision of bilingual programs.[34]

ANOVA test. An analysis of variance (ANOVA) test was also used to examine differences among groups. To do this, ANOVA models included orthogonal contrasts designed to assess whether the independent and dependent variables' relationship was linear or quadratic or whether there were other differences among the categories of the independent variable. The squares of the standard errors, the variance between the means, and the unweighted sample sizes were used to partition the total sum of squares into within- and between-group sums of squares. These were used to create mean squares for the within- and between-group variance components and their corresponding *F* statistics, which were then compared with published values of *F* for a significance level of .05. Significant values of both the overall *F* and the *F* associated with the appropriate contrast were used as evidence of a relationship between the two variables.

[34]For more information about this modification of Student's *t*-test, see Snedecor and Cochran 1967, pp. 246–247. For more information about linear regression, see Lewis-Beck 1980.

Appendix D—Selected SASS Publications and Data Products

Results from SASS, along with other information about the survey's design, development, and improvement are available in SASS publications. Copies of the publications below are available by telephoning (877) 4-EDPUBS or through the World Wide Web at www.ed.gov/pubs/edpubs.html.

General Publications about SASS

- *Public School Districts in the United States: A Statistical Profile, 1987–88 to 1993–94* **(NCES 98–203)**
- *Public and Private School Principals in the United States: A Statistical Profile, 1987–88 to 1993–94* **(NCES 97–455)**
- *America's Teachers: Profile of a Profession, 1993–94* **(NCES 97–460)**
- *Schools and Staffing in the United States: A Statistical Profile: 1993–94* **(NCES 96–124)**
- *The Schools and Staffing Survey: Recommendations for the Future* **(NCES 97–596)**

SASS State Data

- *SASS by State, 1993–94 Schools and Staffing Survey: Selected State Results* **(NCES 96–312))**

SASS Teacher Data

- *America's Teachers: Profile of a Profession, 1993–94* **(NCES 97–460)**
- *What Happens in Classrooms? Instructional Practices in Elementary and Secondary Schools, 1994–95* **(NCES 99–348)**
- *Toward Better Teaching: Professional Development in 1993–94* **(NCES 98–230)**
- *Time Spent Teaching Core Academic Subjects in Elementary Schools: Comparisons Across Community School, Teacher, and Student Characteristics* **(NCES 97–293)**
- *Job Satisfaction Among America's Teachers: Effects of Workplace Conditions, Background Characteristics, and Teacher Compensation, 1993–94* **(NCES 97–471)**
- *A Profile of Policies and Practices for Limited English Proficiency Students: Screening Methods, Program Support, and Teacher Training (SASS 1993–94)* **(NCES 97–472)**
- *Out-of-Field Teaching and Educational Equality* **(NCES 96–040)**
- *Teacher Supply, Teacher Qualifications and Teacher Turnover, Aspects of Teacher Supply and Demand in the U.S., 1990–91* **(NCES 95–744)**

SASS Private School Data

- *Private Schools in the U.S.: A Statistical Profile, 1993–94* **(NCES 97–459)**

SASS American Indian Data

- *Characteristics of American Indian and Alaska Native Education, Results from the 1993–94 SASS* **(NCES 97–451)**

SASS School Library Media Center Data

- *School Library Media Centers: 1993–94* **(NCES 98–282)**

SASS Methodology

- *School-level Correlates of Academic Achievement: Student Assessment Scores in SASS Public Schools* **(NCES 1999–338)**
- *Quality Profile for SASS: Aspects of the Quality of Data in the Schools and Staffing Surveys* **(NCES 94–340)**
- *An Analysis of Total Nonresponse in the 1993–94 Schools and Staffing Survey (SASS).* **(NCES 98–243)**
- *1993–94 Schools and Staffing Survey: Sample Design and Estimation* **(NCES 96–089)**
- *1990–91 Schools and Staffing Survey: Sample Design and Estimation* **(NCES 93–449)**
- *1987–88 Schools and Staffing Survey: Sample Design and Estimation* **(NCES 91–127)**

SASS Issue Briefs

- *Schools Serving Family Needs: Extended-Day Programs in Public and Private Schools* **(NCES 97–590)**
- *Programs for Aspiring Principals: Who Participates?* **(NCES 97–591)**
- *Credentials and Tests in Teacher Hiring: What Do Districts Require?* **(NCES 97–592)**
- *Are Limited English Proficient (LEP) Students Being Taught by Teachers with LEP Training?*
- *How Widespread Is Site-Based Decisionmaking in Public Schools?* **(NCES 97–908)**
- *Public School Choice Programs, Availability and Student Participation* **(NCES 97–909)**
- *Teachers' Sense of Community: How Do Public and Private Schools Compare?* **(NCES 97–910)**
- *Are High School Teachers Teaching Core Subjects Without College Majors or Minors in Those Subjects?* **(NCES 96–839)**

Teacher Followup Survey

- *Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Followup Survey, 1994–95* **(E.D. Tab, NCES 97–450)**

SASS Data on CD-ROM

- *Schools and Staffing Survey (SASS) and Teacher Followup Survey (TFS) CD-ROM: Electronic Codebook and Public Use Data for 3 Cycles of SASS and TFS* **(NCES 97–453)**

SASS and TFS User's Manuals

- *1993–94 Schools and Staffing Survey Data File User's Manual Volume I: Survey Documentation* **(NCES 96–142)**
- *1993–94 Schools and Staffing Survey Data File User's Manual Volume II: Restricted-Use Codebook* **(NCES 96–142-II)**
- *1993–94 Schools and Staffing Survey Data File User's Manual Volume III: Public-Use Codebook* **(WP 1999–12)**
- *1994–95 Teacher Followup Survey Data File User's Manual: Public-Use Version* **(NCES 98–232)**
- *1994–95 Teacher Followup Survey Data File User's Manual: Restricted-Use Version* **(WP 1999–14)**

SASS information can also be found on the Internet (http://nces.ed.gov/surveys/sass).

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